光电器件行业先锋—奥伦德科技

Optoelectronic device industry pioneer—Orient Technology

深圳市奥伦德科技股份有限公司

SHENZHEN ORIENT POLYTRON TECHNOLOGIES INC

OR
奥伦德
ORIENT

深圳市奥伦德科技股份有限公司

SHENZHEN ORIENT TECHNOLOGY CO.,LTD.

深圳市奥伦德元器件有限公司

公司地址：深圳市龙岗区黄阁路天安数码城4栋3楼A座

Add:3rd Floor,Block A,No.4 Building,Tian'an Cyber Park,Huangge Rd,LongGang Dist,Shenzhen,GD.,China.

Tel: 86-755-29980592 29980593　　Fax:86-755-29980950 29980030

E-Mail:salesopto@orient-opto.com　　saleselec@orient-opto.com

http://www.orient-opto.com　　P. C.: 518126

江门市奥伦德光电有限公司

厂址：江门市江海高新区金辉路21号

电话：0750-3697838

邮编：529000

华东办事处

地址：江苏昆山市黄河北路绣衣东村51东202室

张光明13358058505　肖艳芳13382158507

电话：+86-512-5732-7357　传真：+86-512-57324468

邮编：215300

【技能和态度是生存基础】

Skills and attitudes are the basis for survival

【被需要为存在之理由】

Being needed as a reason for existence

奥伦德公司简介
Company profile

奥伦德，1998年创立于广东深圳，是一家专业研发制造GaN外延、光电芯片及光电器件封装的国家高新技术企业，并拥有多项发明专利和实用新型专利。

奥伦德致力于光电器件行业二十余年，研发创新，产品紧跟市场前沿，产品线集中优势资源，由上而下垂直整合，其中涵盖上游GaN外延片、GaAs\GaAlAs红外芯片、GaP可见光芯片、PD\PT光敏接收芯片等；下游封装器件中，光耦耦合器已形成了晶体管、达林顿、可控硅、高速、SSR、IGBT六大系列，产品型号百余种，全系列取得了UL、VDE、CE、CQC等各项安全认证，应用于汽车电子、高铁航空、5G通信、智能家居、国家电网、电源驱动等各行各业中；研发生产的光电传感器、红外光电开关、LED等也应用在各类指示、显示、光电控制行业。

行远必自尔，追求无止境。奥伦德人秉承“合作、勤奋、务实”的理念，“客户至上”的原则，共创奥伦德的新纪元。

Orient, founded in Guangdong Shenzhen in 1998, is a national high-tech enterprise specializing in R&D and manufacturing of GaN epitaxy, optoelectronic chips and optoelectronic device packages, and owns a number of invention patents and utility model patents.

Orient has been committed to the optoelectronic device industry for more than 20 years. We has been researching and innovating. Our product keeps up with the forefront of the market. Our product line focuses on superior resources and is vertically integrated from top to bottom. Upstream includes GaN epitaxial wafers, GaAs\GaAlAs infrared chips, GaP visible light Chips, PD\PT photosensitive receiver chips, etc. In downstream packaged devices, optocouplers have covered six series of transistors, Darlington, SCR, high-speed, SSR, and IGBT, which obtained safety certifications such as UL, VDE, CE, CQC, etc. and used in automotive electronics, high-speed rail aviation, 5G communication, smart house, national power grid, and power supply. Our photoelectric sensors, infrared photoelectric switches and LEDs are used in various indication, display and photoelectric control industries.

Orient team adhere to the concept of "cooperation, diligence and pragmatism" and the principle of "customer first" to create a new era.

企业荣誉 Enterprise honor

卓越品质，资质为证
我们追求的不仅仅是荣誉，更要求客户的认可。
奥伦德视品质如生命，以创新为宗旨，尽心尽力，孜孜不倦，
为半导体事业贡献自己的光和热。

Development history

Yesterday, Orient had only a blue sky, ambition and enthusiasm.

Over the years, the rapids have been surging, the waves have been washing away the sand, going through hardships and going beyond.

Today, it has become a trendsetter in the industry.

The Orient brand has been achieved by the brand–new management concept, excellent talent resources, advanced management system and high new technology.

With research and development, production and application of epitaxy, chip and package as the core, it has expanded widely at home and abroad, and hundreds of close partners have become the model of the industry.

Good social reputation and deep corporate culture have formed Orient's perfect connotation system ...

Tomorrow, it will be better ...

In the new course, the Orients will walk side by side, arm in arm, heart to heart, laughing, singing and moving forward ...

1998
In June 1998, Orient Electronics Co., Ltd. was established;

1999
In 1999, Orient passed ISO 9001: 2000 quality system certification;

2001
In September 2001, Shenzhen Orient Opto Electronic Co., Ltd. was established;

2002
In February 2002, Orient developed and produced LED's binary and ternary chips;
In May 2002, Orient first developed quad chip in China;
In November 2002, Orient developed 940nm chip;

2003
In 2003, Orient obtained the high–tech identification certificate;
In 2003, Orient began to produce infrared transmitting tubes and infrared receiving heads;

2004
In March 2004, Orient first developed 850 nm chip in China;
In November 2004, Orient first developed and produced the super bright red chip SR in China;

2005
In March 2005, Orient obtained the utility model patent certificate (LED display);
In December 2005, Shenzhen Orient Technology Co., Ltd. was established;
In December 2005, Orient began to produce pure blue and pure green chips;
In December 2005, PD production line was began to put into operation;

2008
In March 2008, Shenzhen Orient Components Co., Ltd. was established;
In April 2008, Orient first started the production of optocouplers in China;
In October 2008, Orient passed CE certification;

2009
In March 2009, Orient passed CQC certification;
In March 2009, Orient passed UL certification;
In March 2009, Orient won the title of national high–tech enterprise;

2011
In October 2011, Orient put LED epi wafer project into production;

2013
In June 2013, Orient successfully developed and mass produced many types of LED epi wafers;

2015
In February 2015, Orient landed on the new 3rd board with the security code 832016; In August 2015, the optocoupler for smart meters developed by Orient was certified by the State Grid;

2017
In February 2017, Jiangmen R&D Manufacturing Center was invested, completed and put into use.In October 2017, Orient successfully developed many types of new optocouplers and began to expand production;

2018
In 2018, the optocoupler for smart meters by Orient was certified by the State Grid again.

2019
RD IGBT and SSR photocoupler

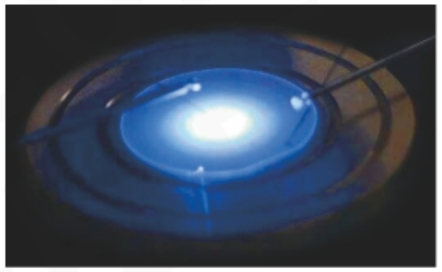
Product introduction

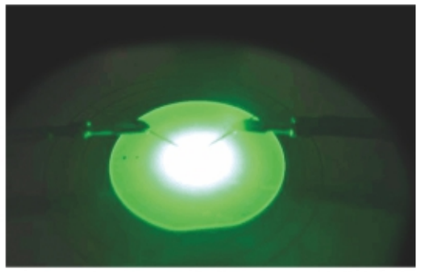
CONTENTS

GaN LED Epi Wafer

GaN LED Epi Wafer

Feature	Package	Market
MOCVD Epi-wafer	High-Power Big Chip	Indicator Light
Excellent Uniformity	Low-Power Small Chip	Dot Matrix
Good Reliability		Digital tube
High Anti-static Electricity		Back Light





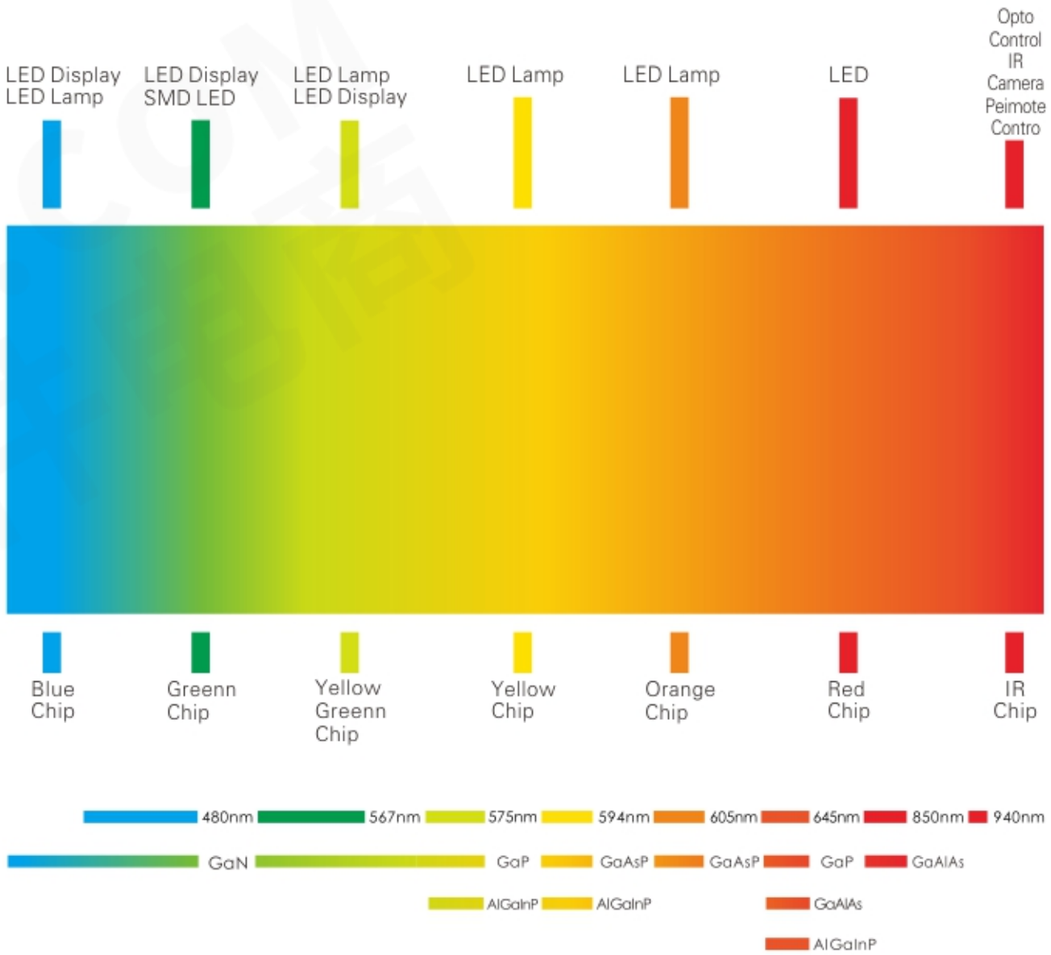
Epi Wafer	WAFER SIZE	Substrate	Structure	Peak wavelength	ESD (HBM)/V
GaN Blue Epi wafer	2 inch	Sapphire	N /MQWs/P	440-475nm	>2000V
	4 inch	Sapphire	N /MQWs/P	440-475nm	>2000V
GaN Green Epi Wafer	2 inch	Sapphire	N /MQWs/P	510-535nm	>2000V
	4 inch	Sapphire	N /MQWs/P	510-535nm	>2000V

奥伦德 ORIENT

Chip

Orient Chip Series

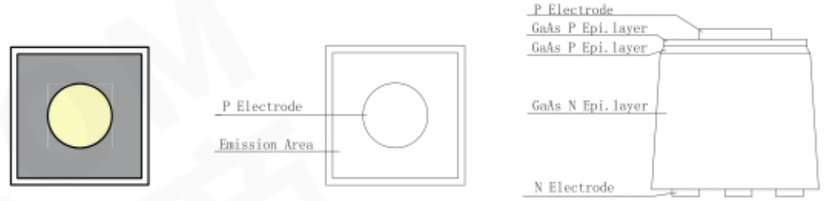
Application



Chip

GaAs /GaAs 940 IrED Chip

Features	Package	Market
GaAs/GaAs Homo-Epitaxial growth	Lamp	Peripheral Device
Good Reliability	SMD etc	Photo Coupler
Good spectral matched to Si Detector		Photo Interrupter



Size

Part No.	L(um)	W(um)	T(um)	P-pad(um)	N-pad(um)
008IRC	200 ± 30	200 ± 30	215 ± 20	104 ± 10	Dot(Φ55)
ORT010IRC	245 ± 30	245 ± 30	215 ± 20	104 ± 10	Dot(Φ45)
ORT010IRC-L	204 ± 30	204 ± 30	215 ± 20	104 ± 10	Dot(Φ45)
ORT109IRC	220 ± 30	220 ± 30	215 ± 20	104 ± 10	Dot(Φ45)

Material /Structure

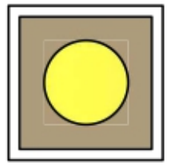
Substrate Material	GaAs
Epitaxy Structure	GaAs
P electrode(anode)	Al Alloy
N electrode(cathode)	Au Alloy

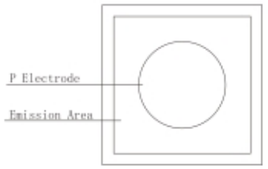
Photoelectric Properties

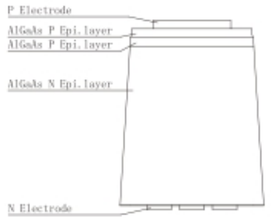
Part No.	Forward VoltageVF(V)	Luminous Intensity Po(mw)	Peak Wavelength WLP(nm)@20mA
008IRC	<1.35@20mA	>0.5@20mA	930-950
ORT010IRC	<1.3@20mA	>0.5@20mA	930-950
ORT010IRC-L	<1.3@20mA	>0.5@20mA	930-950
ORT109IRC	<1.3@20mA	>0.5@20mA	930-950

GaAlAs/GaAs 940 IrED Chip

Features	Package	Market
GaAlAs/GaAs Wafer	Lamp	Remote Controller
High Power	SMD etc	Peripheral Device
Good spectral matched to Si Detector		Photo Coupler
		Photo Interrupter







Size

Part No.	L(um)	W(um)	T(um)	P–pad(um)	N–pad(um)
ORT007IRA	175 ± 30	175 ± 30	215 ± 20	104 ± 10	Dot(Φ55)
ORT008IRA	200 ± 30	200 ± 30	215 ± 20	104 ± 10	Dot(Φ55)
ORT010IRA	245 ± 30	245 ± 30	215 ± 20	104 ± 10	Dot(Φ55)
ORT012IRA	280 ± 30	280 ± 30	215 ± 20	104 ± 10	Dot(Φ45)
ORT112IRA	300 ± 30	300 ± 30	215 ± 20	104 ± 10	Dot(Φ45)
ORT912IRA	300 ± 30	300 ± 30	215 ± 20	104 ± 10	Dot(Φ45)
ORT114IRA–L	330 ± 30	330 ± 30	215 ± 20	104 ± 10	Dot(Φ45)
ORT114IRA	350 ± 30	350 ± 30	215 ± 20	104 ± 10	Dot(Φ45)
ORT015IRA	380 ± 30	380 ± 30	215 ± 20	104 ± 10	Dot(Φ45)
ORT016IRA	405 ± 30	405 ± 30	215 ± 20	104 ± 10	Dot(Φ45)

Material /Structure

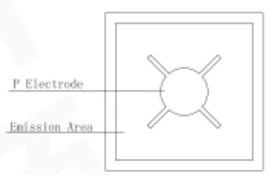
Substrate Material	GaAlAs
Epitaxy Structure	GaAlAs/GaAs
P electrode(anode)	Au Alloy
N electrode(cathode)	Au Alloy

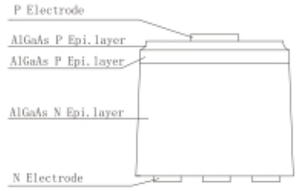
Photoelectric Properties

Part No.	Forward Voltage VF(V)	Luminous Intensity Po(mw)	Peak Wavelength WLP(nm)@20mA
ORT007IRA	< 1.35@20mA	> 1.3@20mA	930–950
ORT008IRA	< 1.3@20mA	> 1.4@20mA	930–950
ORT010IRA	< 1.3@20mA	> 1.6@20mA	930–950
ORT012/112/912IRA	< 1.3@20mA	> 1.7@20mA	930–950
ORT114IRA–L/114IRA	< 1.25@20mA	> 1.75@20mA	930–950
ORT015IRA	< 1.25@20mA	> 1.8@20mA	930–950
ORT016IRA	< 1.25@20mA	> 1.85@20mA	930–950

GaAlAs/GaAlAs 850 IrED Chip

Features	Package	Market
GaAlAs/GaAlAs Wafer	Lamp	CCD Camera
Very High Power	SMD etc	Surveillance
High Speed		IrDA
High Performance		Encoder
		Data Communication





Size

Part No.	L(um)	W(um)	T(um)	P–pad(um)	N–pad(um)
ORT509IRA	200 ± 30	200 ± 30	130–220	104 ± 10	Dot(Φ55)
ORT810IRA	250 ± 30	250 ± 30	130–220	104 ± 10	Dot(Φ55)
ORT512IRA	300 ± 30	300 ± 30	130–220	104 ± 10	Dot(Φ55)
ORT812IRA	280 ± 30	280 ± 30	130–220	104 ± 10	Dot(Φ45)
ORT814IRA	350 ± 30	350 ± 30	130–220	104 ± 10	Dot(Φ45)
ORT816IRA	405 ± 30	405 ± 30	130–220	104 ± 10	Dot(Φ45)

Material /Structure

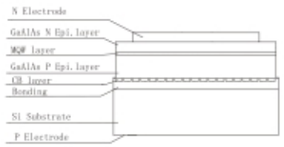
Substrate Material	GaAlAs
Epitaxy Structure	GaAlAs/GaAlAs
P electrode(anode)	Au Alloy
N electrode(cathode)	Au Alloy

Photoelectric Properties

Part No.	Forward Voltage VF(V)	Luminous Intensity Po(mw)	Peak Wavelength WLP(nm)@20mA
ORT509IRA	< 1.5V@20mA	> 3.2@20mA	840–870
ORT810IRA	< 1.45V@20mA	> 3.5@20mA	840–870
ORT512/812IRA	< 1.45V@20mA	> 4.2@20mA	840–870
ORT814IRA	< 1.45@20mA	> 4.8@20mA	840–870
ORT816IRA	< 1.40@20mA	> 5.4@20mA	840–870

GaAlAs Wafer bonding chips

Features	Package	Market
High radiant flux	Lamp	Data Communication
Thin film structure	PLCC etc	Surveillance
Vertical electrode		Lighting
High driving current		



Size

Part No.	L(um)	W(um)	T(um)	P-pad(um)	N-pad(um)
ORTWB850N-14	355±30	355±30	170±10	104±10	Full Area
ORTWB940N-12	300	300	170	104±10	Full Area

Material /Structure

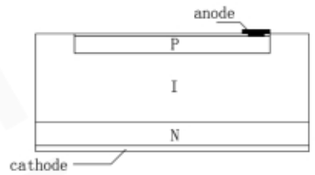
Substrate Material	GaAlAs
Epitaxy Structure	GaAlAs/GaAlAs MQW
P electrode(anode)	Au alloy
N electrode(cathode)	Au alloy

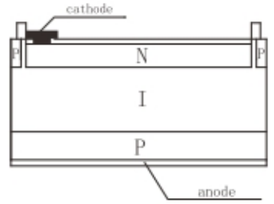
Photoelectric Properties

Part No.	Forward Voltage VF(V)	Luminous Intensity Po(mw)	Peak Wavelength WLP(nm)@20mA
ORTWB850-12/14/20/28	<2.2@100mA	>30	840-870
ORTWB940-12/14/20/28	<2.2@100mA	>25	930-950

Si Photo diode

Features	Package	Market
NIP silicon structure	Lamp	Infrared receiving
Excellent Uniformity	SMD	Tube
Good Reliability	TO etc	Electronic whiteboard
		Optical communication





Size

Part No.	L(um)	W(um)	T(um)	Active area(um)	pad(um)
ORPD2015	390±30	390±30	180±10	275×275	80×80±10
ORPD2128	670±30	670±30	300±10	540×540	120×120±10
ORPD2138	940±30	940±30	300±10	820×820	Φ110±10
ORPD2140	1000±30	1000±30	300±10	840×840	130×130±10
ORPD2143	1090±30	1090±30	300±10	910×910	200×200±10
ORPD2151	1270±30	1270±30	300±10	1090×1090	254×250±10
ORPD2155	1380±30	1380±30	300±10	1220×1220	150×150±10
ORPD2160	1520±30	1520±30	300±10	1350×1350	250×250±10
ORPD2165	1480±30	1225±30	300±10	1380×1125	Φ150±10
ORPD212460	610±30	1520±30	300±10	450×1360	Φ130±10
ORPD212650	660±30	1270±30	300±10	500×1110	Φ130±10
ORPD20120	3020±30	3020±30	300±10	2790×2790	Φ206±10

Material /Structure

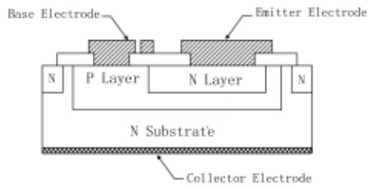
Substrate Material	Si
Epitaxy Structure	N/I/P or P/I/N
N electrode(anode)	Al alloy
P electrode(cathode)	Silver alloy

Photoelectric Properties

Part No.	Forward Voltage VF (V) @10mA	Reverse BrokenVoltage (V) @IR=100μA, H=0	Light Current IL (mA) VR=5V,Has1mw/cm^2,@940nm	Reverse Dark Current (nA) ID@VR=10V, H=0
PD2015	<1.3	>35	<10	>4
PD2128	<1.3	>35	<10	>15
PD2138	<1.3	>35	<10	>28
PD2140	<1.3	>35	<10	>32
PD2143	<1.3	>35	<10	>36
PD2151	<1.3	>35	<10	>50
PD2155	<1.3	>35	<10	>62
PD2160	<1.3	>35	<10	>80
PD2165	<1.3	>35	<10	>58
PD212460	<1.3	>35	<10	>27
PD212650	<1.3	>35	<10	>23
PD20120	<1.3	>35	<10	>100

Si photo transistor

Features	Package	Market
NPN silicon structure	Lamp	Infrared receiving
Excellent Uniformity	SMD etc	Tube
Good Reliability		Electronic whiteboard
		Photo Coupler
		Photo Interrupter



Size

Part No.	L(um)	W(um)	T(um)	Base(um)	Emitter(um)
ORPT3041	415±30	415±30	200±10	70*70	138*138
ORPT3046	460±30	460±30	200±10	80*80	135*135
ORPT3061	610±30	610±30	200±10	90*90	155*155

Material /Structure

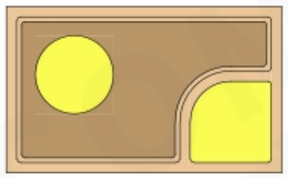
Substrate Material	Si
Epitaxy Structure	N/P/N
P electrode(anode)	Al alloy
N electrode(cathode)	Au alloy

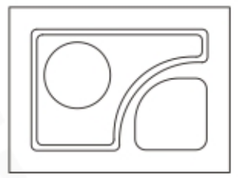
Photoelectric Properties

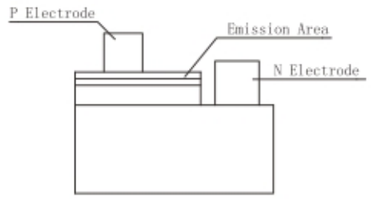
Part No.	Iceo(nA)@20V	BVceo(V)@50uA	BVceo(V)@500uA	HFE(@VCE=10V&IC=1mA)
ORPT3041	<50nA	>7	>70	300–2000
ORPT3046	<50nA	>7	>70	300–2000
ORPT3061	<50nA	>7	>70	300–2500

InGaN/GaN LED Chips

Features	Package	Market
High luminous Intensity	Dot Matrix	Indicator Light
Good Reliability	Digital tube	Dot Matrix
Excellent Uniformity	Lamp	Digital tube
Good Weathering Resistance	SMD etc	Back Light
MOCVD Epi-wafer		







Size

Part No.	L(um)	W(um)	T(um)	P-pad(um)	N-pad(um)
ORT0811B	265±10	160±10	100±10	80±5	85±5
ORT0912B	275±10	185±10	100±10	80±5	85±5
ORT0912G	275±10	185±10	100±10	80±5	85±5
ORT09AB	190±10	130±10	90±10	65±5	65±5
ORT09AG	190±10	130±10	90±10	65±5	65±5
ORT0714	355±30	160±30	150±25	65±5	65±5

Material /Structure

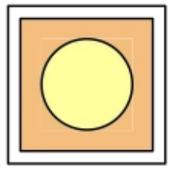
Substrate Material	Sapphire
Epitaxy Structure	InGaN/GaN MQWs
P electrode(anode)	Au alloy
N electrode(cathode)	Au alloy

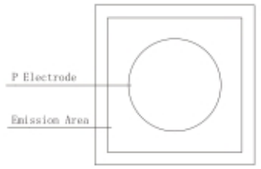
Photoelectric Properties

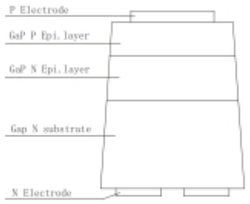
Part No.	Forward VoltageVF(V)	Luminous IntensityIV	Dominant Wavelength WLD(nm)	ESD(HBM)rate@2KV
ORT0811B	<2.9@5mA	>60mcd@5mA	448-468@5mA	>98%
ORT0912B	<3.2@20mA	>24mw@20mA	448-475@20mA	>98%
ORT0912G	<3.2@20mA	>700mcd@20mA	510-535@20mA	>98%
ORT09AB	<3.1@5mA	>50mcd@5mA	448-475@5mA	>98%
ORT09AG	<3.0@5mA	>200mcd@5mA	512-530@5mA	>98%
ORT0714	<3.3@20mA	>24@20mA	447.5-470@20mA	>98%

GaP/GaP LED Chips

Features	Package	Market
Homo-Epitaxial growth	Dot Matrix	Indicator Light
Good Reliability	Digital tube	Digital tube
Good Weathering Resistance	Lamp	RJ45
	SMD etc	Back Light







Size

Part No.	L(um)	W(um)	T(um)	P-pad(um)	N-pad(um)
ORT007RD	165 ± 30	165 ± 30	250 ± 30	95 ± 10	Full Area
ORT008RD	180 ± 30	180 ± 30	250 ± 30	104 ± 10	Full Area
ORT007YG	150 ± 30	150 ± 30	210 ± 30	90 ± 10	Full Area
ORT008YG	180 ± 30	180 ± 30	210 ± 30	100 ± 10	Net(25)
ORT009YG	215 ± 30	215 ± 30	240 ± 30	95 ± 10	Dot(Ø45)
ORT008YGK	165 ± 30	165 ± 30	240 ± 30	104 ± 10	Full Area
ORT007YGL	155 ± 30	155 ± 30	220 ± 30	92 ± 10	Net(25)
ORT108YG	180 ± 30	180 ± 30	210 ± 30	100 ± 10	Full Area

Material /Structure

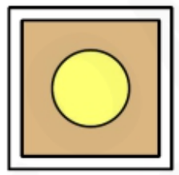
Substrate Material	GaP
Epitaxy Structure	GaP/GaP
P electrode(anode)	Au alloy/Al alloy
N electrode(cathode)	Au alloy

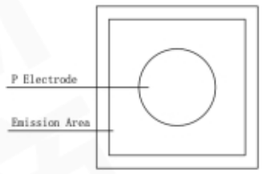
Photoelectric Properties

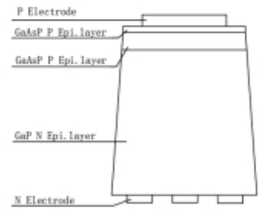
Part No.	Forward VoltageVF(V)	Luminous IntensityPo(mw)	Dominant Wavelength WLD(nm)@20mA
ORT007RD	<2.6V@20mA	>0.3@5mA	620-650
ORT008RD	<2.4V@20mA	>0.5@5mA	620-650
ORT008YG	<2.4V@20mA	>7@20mA	568-574
ORT009YG	<2.4V@20mA	>7@20mA	568-574
ORT007YG	<2.6V@20mA	>6@20mA	568-574
ORT008YGK	<2.6V@20mA	>6@20mA	568-574
ORT007YGL	<2.4V@20mA	>5.5@20mA	568-574
ORT108YG	<2.6V@20mA	>6@20mA	568-574

GaAsP/GaP LED Chips

Features	Package	Market
GaAsP/GaP Epi-wafer	Dot Matrix	Indicator Light
Good Reliability	Digital tube	Digital tube
Excellent Uniformity	Lamp	RJ45
Good Weathering Resistance	SMD etc	Display







Size

Part No.	L(um)	W(um)	T(um)	P-pad(um)	N-pad(um)
ORT008HO	190 ± 30	190 ± 30	200 ± 30	104 ± 10	Net(25)
ORT007HY	165 ± 30	165 ± 30	200 ± 30	95 ± 10	Full Area
ORT008HY	190 ± 30	190 ± 30	160 ± 30	105 ± 10	Full Area
ORT007SO	165 ± 30	165 ± 30	180 ± 30	90 ± 10	Full Area

Material /Structure

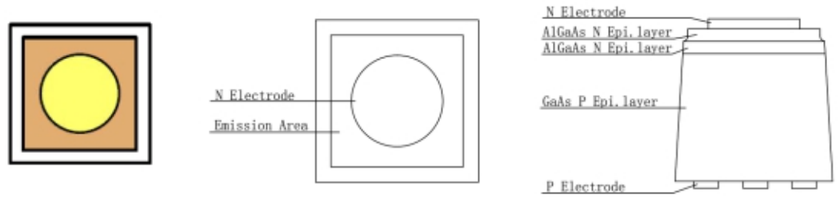
Substrate Material	GaP
Epitaxy Structure	GaAsP/GaP
P electrode(anode)	Au alloy/Al alloy
N electrode(cathode)	Au alloy

Photoelectric Properties

Part No.	Forward VoltageVF(V)	Luminous IntensityPo(mw)	Dominant WavelengthWLD(nm)@20mA
ORT008HO	<2.4V@20mA	>5@20mA	613-623
ORT008HY	<2.3V@20mA	>4@20mA	585-593
ORT007HY	<2.3V@20mA	>3@20mA	585-593
ORT007SO	<2.35V@20mA	>4@20mA	600-613

GaAlAs/GaAs LED Chips

Features	Package	Market
High luminous Intensity	Dot Matrix	Indicator Light
GaAlAs/GaAs Epi-wafer	Digital tube	Digital tube
Single Heterojunction Structure	Lamp	Display
	SMD etc	



Size

Part No.	L(um)	W(um)	T(um)	P-pad(um)	N-pad(um)
ORT007SRH	165±30	165±30	245±30	95±10	Full Area
ORT008SRH	190±30	190±30	245±30	100±10	Full Area

Material /Structure

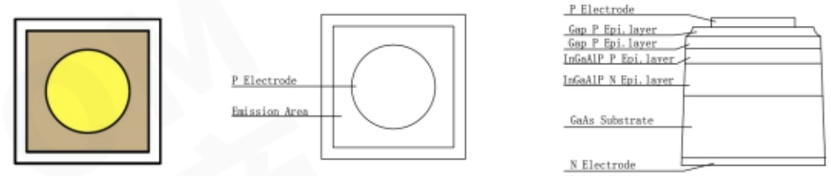
Substrate Material	GaAs
Epitaxy Structure	GaAlAs/GaAs
P electrode(anode)	Au alloy/Al alloy
N electrode(cathode)	Au alloy

Photoelectric Properties

Part No.	Forward VoltageVF(V)	Luminous IntensityPo(mw)	Peak Wavelength WLP(nm)@20mA
007SRH	<2.10@20mA	>3@20mA	640-650
008SRH	<2.10@20mA	>3.5@20mA	640-650

AlInGaP/GaAs LED Chips

Features	Package	Market
High luminous Intensity	Dot Matrix	Indicator Light
MOVPE Epi-wafer	Digital tube	Digital tube
Excellent Uniformity	Lamp	RJ45
Low Cost	SMD etc	X'mas lamp etc



Size

Part No.	L(um)	W(um)	T(um)	P-pad(um)	N-pad(um)
ORT008URV	155±30	155±30	180±30/100±30	90±10	Full Area
ORT008USRK	165±30	165±30	180±30	95±10	Full Area
ORT008UYGK	165±30	165±30	180±30/100±30	95±10	Full Area
ORT108UYG	165±30	165±30	180±30/100±30	95±10	Full Area

Material /Structure

Substrate Material	GaAs
Epitaxy Structure	AlInGaP/GaAs
P electrode(anode)	Au alloy/Al alloy
N electrode(cathode)	Au alloy

Photoelectric Properties

Part No.	Forward VoltageVF(V)	Luminous Intensity Po(mw)	Dominant Wavelength WLD(nm)@20mA
ORT008URV	<2.25	>20	620-640
ORT008USRK	<2.25	>15	635-645
ORT008UYGK	<2.20	>15	567-574
ORT108UYG	<2.30	>15	567-574

Photocoupler

Model total table

Photocoupler type / Package type and size	Photo Transistor	Darlington	Triac Driver	High-speed	Solid State Relay	IGBT	Schmitt Trigger
DIP4 (6.4x4.6x3.48)	ORPC-817 ORPC-814 ORPC-816 ORPC-851	ORPC-815 ORPC-852	OR-T302X (X=1/2/3) OR-T304X (X=1/2/3) OR-T305X (X=1/2/3) OR-T306X (X=1/2/3) OR-T308X (X=1/2/3)		OR-406A OR-425A OR-440A OR-460A		
DIP6 (7.14x6.5x3.5)	OR-4N25 OR-4N26 OR-4N27 OR-4N28 OR-4N35 OR-4N36 OR-4N37 OR-4N38 OR-H11AA1 OR-H11AA2 OR-H11AA3 OR-H11AA4	OR-4N29 OR-4N30 OR-4N31 OR-4N32 OR-4N33	OR-MOC301X(X=0/1/2) OR-MOC302X(X=1/2/3) OR-MOC305X(X=1/2/3) OR-MOC303X(X=1/2/3) OR-MOC304X(X=1/2/3) OR-MOC306X(X=1/2/3) OR-MOC308X(X=1/2/3)		OR-606A OR-625A OR-640A OR-660A		H11L1
DIP6/7/8 (9.68x6.5x3.5)	ORPC-824 ORPC-827	ORPC-825	OR-0223 OR-1223 OR-2223 OR-3223	OR-6N135 OR-6N136 OR-6N137 OR-6N138 OR-6N139 OR-4502 OR-4503 OR-4504 OR-2200 OR-2201 OR-2202 OR-2530 OR-2531 OR-2601 OR-2611 OR-2630 OR-2631	OR-840A OR-860A OR-5211	OR-3120 OR-3150	
DIP16 (19.84x6.5x3.5)	ORPC-847 ORPC-844	ORPC-845					
SSOP4 (4.4x 2.6x2.0)	OR-3H7 OR-3H4	OR-3H5					
SSOP16 (10.3x4.4x2.0)	OR-247 OR-244	OR-245					

Model total table

Photocoupler type / Package type and size	Photo Transistor	Darlington	Triac Driver	High-speed	Solid State Relay	IGBT	Schmitt Trigger
SOP4/5/6 (4.45x3.85x2.0)	OR-357 OR-354	OR-352 OR-355	OR-M302X (X=2/3/4) OR-M304X (X=2/3/4) OR-M305X (X=2/3/4) OR-M306X (X=2/3/4) OR-M308X (X=2/3/4)	OR-M501 OR-M601 OR-M701	OR-M440A OR-M460A	OR-155E	
LSOP4 (7.5x2.54x2.0)	OR-10XX (XX=01……20)						
LSO6 (6.81 × 4.58 × 3.18)				OR-50L OR-60L		OR-W314 OR-W340 OR-W341	
SO8 (4.88 × 3.92 × 3.18)	OR-D205 OR-D206 OR-D207 OR-D211 OR-D213 OR-D217			OR-0452 OR-0453 OR-0500 OR-0501 OR-0600 OR-0601 OR-0611 OR-0530 OR-0531 OR-063L OR-060L OR-050L			
LSO8 (13.6 × 6.248 × 3.607)				OR-H61L			

Photocoupler package

picture	package	Size L*W*H (mm)
DIP4  DIP4-M  SMD4 	DIP4	6.4x4.6x3.48
DIP6  DIP6-M  SMD6 	DIP6	7.14x6.5x3.5
DIP6 	DIP6	9.68x6.5x3.5
DIP7 	DIP7	9.68x6.5x3.5
DIP8  DIP8-M  SMD8 	DIP8	9.68x6.5x3.5
DIP16  DIP16-M  SMD16 	DIP16	19.84x6.5x3.5
SSOP4 	SSOP4	4.4x2.6x2
SSOP16 	SSOP16	10.3x4.4x2.0
SOP4  SOP5  SOP6 	SOP4/5/6	4.45x3.95x2.05
LSOP4 	LSOP4	7.5x3.6x2
LSO6 	LSO6	6.81x4.58x3.18
SO8 	SO8	4.88x3.92x3.18
LSO8 	LSO8	13.6x6.248x3.607

Photocoupler

Transistor

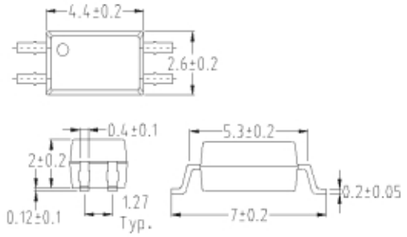
Photo Transistor series of devices each consist of an infrared emitting diodes, optically coupled to a phototransistor detector. They are packaged in DIP4 / DIP6 / DIP8 / DIP16 / SSOP4 / SSOP16 / SOP4 / LSOP4 Plastic body, DIP4 / DIP6 / DIP8 / DIP16 is packaged with wide–lead spacing and SMD options. Is the most common and preferred optocoupler that provides isolated feedback in a regulatory loop, All Photo Transistor series products have passed VDE in Germany and UL in the United States, Certification operating temperature up to + 115° C. The product provides high current transfer ratio while isolating the circuit, the current transfer ratio (CTR) of photo translator series is divided into different gears for customers to choose according to different CTR requirements. increased the AC input options, and launched dual channel and four channel products to meet the selection of multi–channel isolation feedback requirements. We also have the choice of products with base pin. The detailed product parameters can be read in the following table.

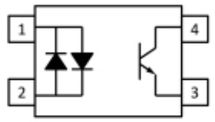
Application

- Ground loop elimination
- Interface between logic circuits
- Level shifting
- Regulation feedback circuits in SMPS

Photo Coupler | Transistor | SSOP4–AC

Unit:mm





- 1. Anode / Cathode
- 2. Cathode / Anode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VFT yp(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso(Vrms)	VCE(SAT) max(V)	CTR(%)
OR–3H4	4.4×2.6×2	1.2	6/8	80	3750	0.2	20–300

Photo Coupler | Transistor | SSOP4–DC

Unit:mm

- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VFT yp(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso(Vrms)	VCE(SAT) max(V)	CTR(%)
OR–3H7	4.4×2.6×2	1.2	5/3	80	3750	0.2	50–600

Photo Coupler | Transistor | SSOP16–AC

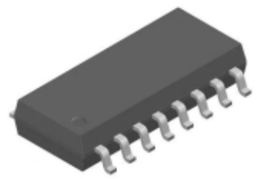
Unit:mm

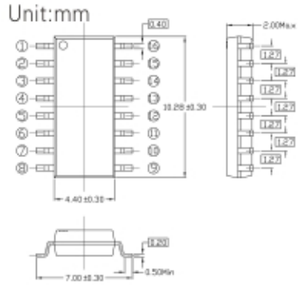
- 1, 3, 5, 7. Anode / Cathode
- 2, 4, 6, 8. Cathode / Anode
- 9, 11, 13, 15. Emitter
- 10, 12, 14, 16. Collector

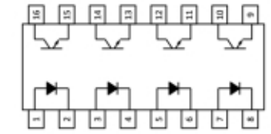
Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso(Vrms)	VCE(SAT) max(V)	CTR(%)
OR–244	10.3×4.4×2	1.2	5/3	80	3750	0.2	20–300

Photo Coupler | Transistor | SSOP16–DC

Unit:mm







- 1, 3, 5, 7. Anode
- 2, 4, 6, 8. Cathode
- 9, 11, 13, 15. Emitter
- 10, 12, 14, 16. Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso(Vrms)	VCE(SAT) max(V)	CTR(%)
OR–247	10.3×4.4×2	1.2	5/3	80	3750	0.2	50–600

Photo Coupler | Transistor | SOP4–AC

Unit:mm

- 1. Anode / Cathode
- 2. Cathode / Anode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VFT yp(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso(Vrms)	VCE(SAT) max(V)	CTR(%)
OR–354	4.4×3.85×2	1.2	6/8	80	3750	0.2	20–300

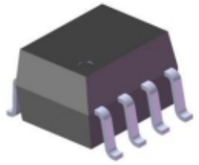
Photo Coupler | Transistor | SOP4–DC

Unit:mm

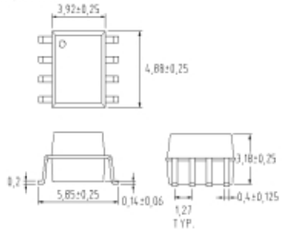
- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

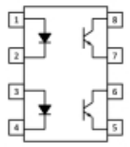
Product	Size (L*W*H mm)	VFT yp(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso(Vrms)	VCE(SAT) max(V)	CTR(%)
OR–357	4.4×3.85×2	1.2	3/4	80	3750	0.2	50–600

Photo Coupler | Transistor | SO8-DC



Unit:mm



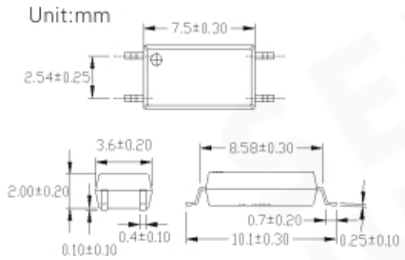


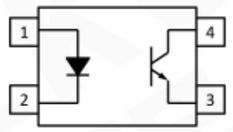
- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
OR-D205	4.88x3.92x3.18	1.2	1.6 / 2.2	80	3750	0.4	40-80
OR-D206	4.88x3.92x3.18	1.2	1.6 / 2.2	80	3750	0.4	63-125
OR-D207	4.88x3.92x3.18	1.2	1.6 / 2.2	80	3750	0.4	100-200
OR-D211	4.88x3.92x3.18	1.2	1.6 / 2.2	80	3750	0.4	20min
OR-D213	4.88x3.92x3.18	1.2	1.6 / 2.2	80	3750	0.4	100min
OR-D217	4.88x3.92x3.18	1.2	1.6 / 2.2	80	3750	0.4	100min

Photo Coupler | Transistor | LSOP4-DC

Unit:mm



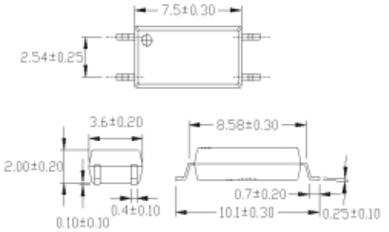


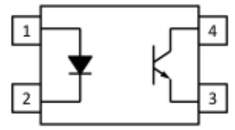
- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
OR-1000	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	50-600
OR-1001	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	100-150
OR-1002	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	60-125
OR-1003	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	100-200
OR-1004	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	100-200
OR-1005	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	50-150
OR-1006	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	100-300
OR-1007	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	80-160

Photo Coupler | Transistor | LSOP4-DC

Unit:mm



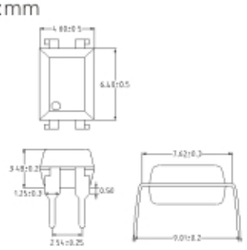


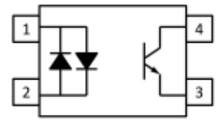
- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
OR-1008	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	130-260
OR-1009	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	200-400
OR-1010	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	150-300
OR-1014	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	160-320
OR-1015	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	63-125
OR-1018	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	100-200
OR-1019	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	250-500
OR-1020	7.5×3.6×2	1.25	2 / 3	70	5000	0.3	300-450

Photo Coupler | Transistor | DIP4-AC

Unit:mm



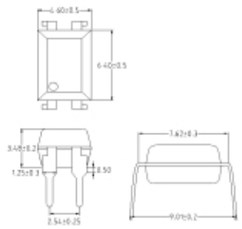


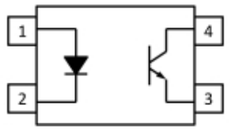
- 1. Anode / Cathode
- 2. Cathode / Anode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
ORPC-814	6.4×4.6×3.48	1.2	7/11	80	5000	0.2	20-300

Photo Coupler | Transistor | DIP4-DC

Unit:mm



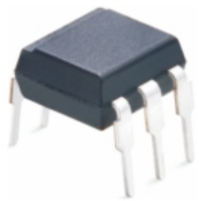


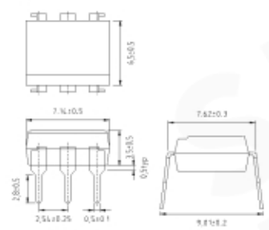
- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
ORPC-816	6.4×4.6×3.48	1.2	4/3	80	5000	0.2	50-600
ORPC-817	6.4×4.6×3.48	1.2	4/3	35	5000	0.2	50-600
ORPC-851	6.4×4.6×3.48	1.2	4/3	350	5000	0.2	50-600

Photo Coupler | Transistor | DIP6-AC

Unit:mm

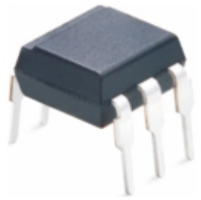




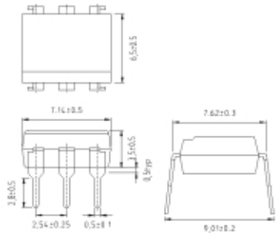
- 1. Anode / Cathode
- 2. Cathode / Anode
- 3. No Connection
- 4. Emitter
- 5. Collector
- 6. Base

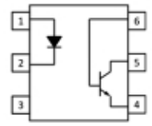
Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
OR-H11A1	7.14×6.5×3.5	1.2	10/10	80	5000	0.4	20min
OR-H11A2	7.14×6.5×3.5	1.2	10/10	80	5000	0.4	10min
OR-H11A3	7.14×6.5×3.5	1.2	10/10	80	5000	0.4	50min
OR-H11A4	7.14×6.5×3.5	1.2	10/10	80	5000	0.4	100min

Photo Coupler | Transistor | DIP6-DC



Unit:mm



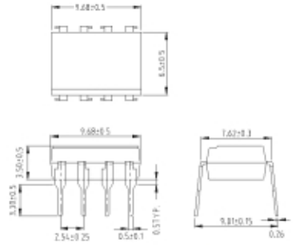


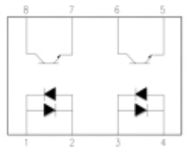
- 1. Anode / Cathode
- 2. Cathode / Anode
- 3. No Connection
- 4. Emitter
- 5. Collector
- 6. Base

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
4N25	7.14×6.5×3.5	1.2	3/3	80	5000	0.5	20 min.
4N26	7.14×6.5×3.5	1.2	3/3	80	5000	0.5	20 min.
4N27	7.14×6.5×3.5	1.2	3/3	80	5000	0.5	10 min.
4N28	7.14×6.5×3.5	1.2	3/3	80	5000	0.5	10 min.
4N35	7.14×6.5×3.5	1.2	10/9	80	5000	0.3	100 min.
4N36	7.14×6.5×3.5	1.2	10/9	80	5000	0.3	100 min.
4N37	7.14×6.5×3.5	1.2	10/9	80	5000	0.3	100 min.
4N38	7.14×6.5×3.5	1.2	10/9	80	5000	1	20 min.

Photo Coupler | Transistor | DIP8-AC

Unit:mm

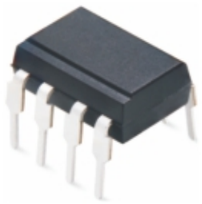




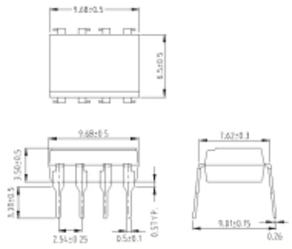
- 1, 2, 3, 4 Anode / Cathode
- 5, 7 Emitter
- 6, 8 Collector

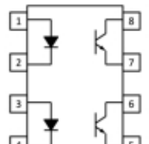
Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
ORPC-824	9.68×6.5×3.5	1.2	7/11	80	5000	0.2	20-300

Photo Coupler | Transistor | DIP8–DC



Unit:mm



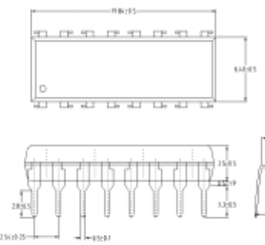


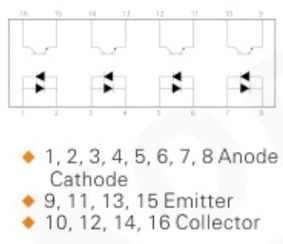
- 1,3 Anode
- 2,4 Cathode
- 5,7 Emitter
- 6,8 Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
ORPC–827	9.68 × 6.5 × 3.5	1.2	3/4	80	5000	0.2	50–600

Photo Coupler | Transistor | DIP16–AC

Unit:mm



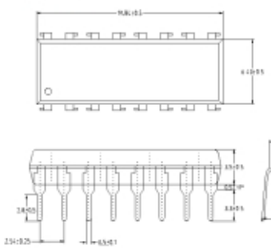


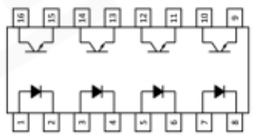
- 1, 2, 3, 4, 5, 6, 7, 8 Anode / Cathode
- 9, 11, 13, 15 Emitter
- 10, 12, 14, 16 Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
ORPC–844	19.84 × 6.5 × 3.5	1.2	7/11	80	5000	0.2	20–300

Photo Coupler | Transistor | DIP16–DC

Unit:mm





- 1, 3, 5, 7. Anode
- 2, 4, 6, 8 .Cathode
- 9,11,13,15. Emitter
- 10,12,14,16.Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
ORPC–847	19.84 × 6.5 × 3.5	1.2	3/4	80	5000	0.2	20–300

Darlington Transistor

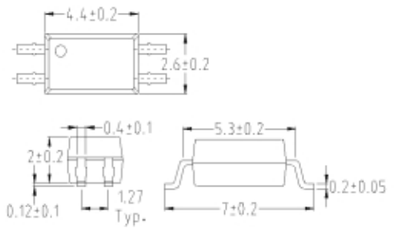
Darlington Transistor series of devices each consist of an GaAs infrared emitting diode emitter, which is optically coupled to a silicon photodarlington detector, is pcaked in DIP4 / DIP6 / DIP8 / DIP16 / SSOP4 / SSOP16 / SOP4 Plastic body, DIP4 / DIP6 / DIP8 / DIP16 is packaged with wide–lead spacing and SMD options. It can provide very high current transfer ratio (CTR) under the condition of low input forward current, The current transfer ratio of CTR can reach up to 7500% at the input of 1mA forward current. All Photo Transistor series products have passed VDE in Germany and UL in the United States, and operating temperature up to + 110 ° C. According to the packaging type, the isolation voltage between the input and output of optocoupler can reach 3750vrms or 5000vrm. The product provides a extremely high current transfer ratio while isolating the circui. The detailed product parameters can be read in the following table.

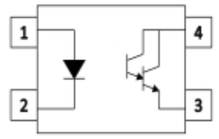
Application

- Hybrid substrates that require high density mounting
- Telephone sets
- Copiers, facsimiles
- Interfaces with various power supply circuits, power distribution boards

Photo Coupler | Darlington Transistor | SSOP4-DC

Unit:mm

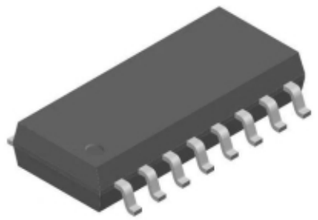




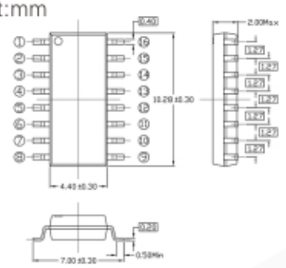
- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

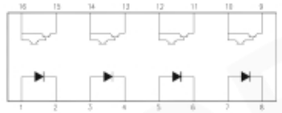
Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
OR-3H5	4.4×2.6×2	1.2	60/53	35	3750	1	600-7500

Photo Coupler | Darlington Transistor | SSOP16-DC



Unit:mm

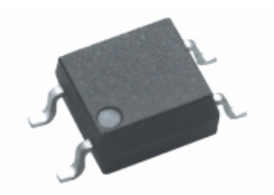




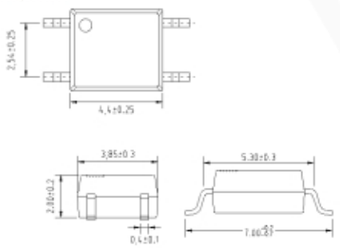
- 1, 3, 5, 7. Anode
- 2, 4, 6, 8Cathode
- 9, 11, 13, 15 Emitter
- 10, 12,14, 16 Collector

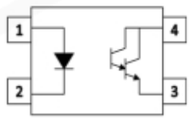
Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
OR-245	10.3×4.4×2	1.2	60/53	35	3750	1	600-7500

Photo Coupler | Darlington Transistor | SOP4-DC



Unit:mm

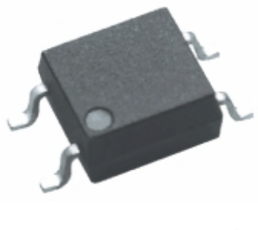




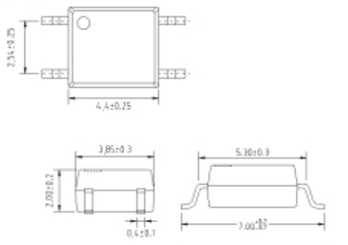
- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

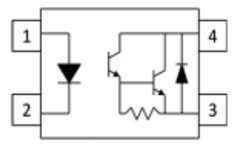
Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
OR-355	4.4×3.85×2	1.2	60/53	35	3750	1	600-7500

Photo Coupler | Darlington Transistor | SOP4-DC



Unit:mm



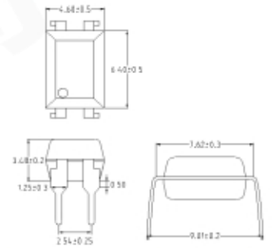


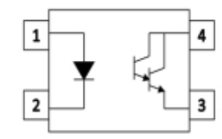
- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
OR-352	4.4×3.85×2	1.2	100/20	350	3750	1	1000 min.

Photo Coupler | Darlington Transistor | DIP4-DC

Unit:mm



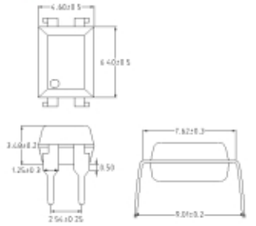


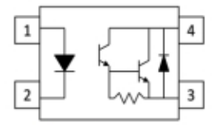
- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
ORPC-815	6.4×4.6×3.48	1.2	60/53	35	5000	1	600-7500

Photo Coupler | Darlington Transistor | DIP4-DC

Unit:mm



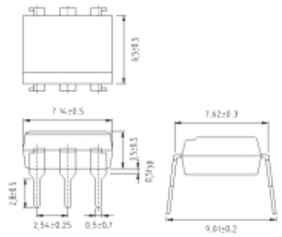


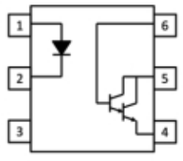
- 1. Anode
- 2. Cathode
- 3. Emitter
- 4. Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
ORPC-852	6.4×4.6×3.48	1.2	300/100	350	5000	1	1000-15000

Photo Coupler | Darlington Transistor | DIP6–DC

Unit:mm



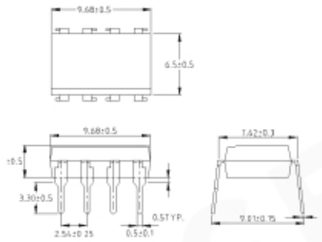


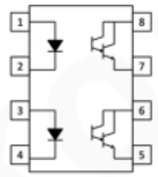
- 1. Anode
- 2. Cathode
- 3. No Connection
- 4. Emitter
- 5. Collector
- 6. Base

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
4N29	7.14×6.5×3.5	1.2	5/40	55	5000	1	100 min.
4N30	7.14×6.5×3.5	1.2	5/40	55	5000	1	100 min.
4N31	7.14×6.5×3.5	1.2	5/40	55	5000	1.2	50 min.
4N32	7.14×6.5×3.5	1.2	5/100	55	5000	1	500 min.
4N33	7.14×6.5×3.5	1.2	5/100	55	5000	1	500 min.

Photo Coupler | Darlington Transistor | DIP8–DC

Unit:mm

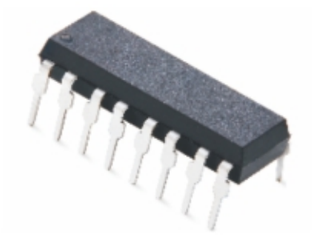




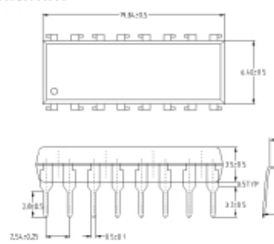
- 1, 3. Anode
- 2, 4. Cathode
- 5, 7. Emitter
- 6, 8. Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
ORPC–825	9.68×6.5×3.5	1.2	60/53	40	5000	1	600–7500

Photo Coupler | Darlington Transistor | DIP16–DC



Unit:mm



- 1, 3, 5, 7. Anode
- 2, 4, 6, 8Cathode
- 9, 11, 13, 15 Emitter
- 10, 12,14, 16 Collector

Product	Size (L*W*H mm)	VF Typ(V)	Rise/Fall Time(us)	BVCEO min(V)	Viso (Vrms)	VCE(SAT) max(V)	CTR(%)
ORPC–845	19.84×6.5×3.5	1.2	60/53	40	5000	1	600–7500

High Speed

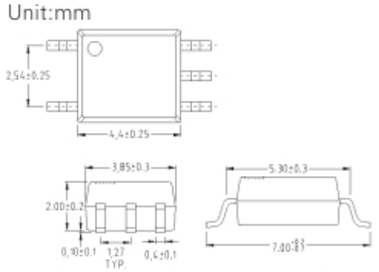
High Speed series of devices each consist of a high e ciency AlGaAs Light Emitting Diode andvery high speed integrated photo–detector logic gate with a strobable output.and is package in DIP8\ SOP5\ LSO6\ SO8 plastic body, DIP8 is packaged with wide–lead spacing and SMD options, This detector features an open collector. The internal shield provides a guaranteed common mode transient. All High Speed Transistor series products through the German VDE and UL certification, product Operating temperature up to + 100 ° C. The isolation pressure between the input and output of the optocoupler can be up to 3750Vrms/5000Vrms/7500Vrms depending on the type of package. Detailed product parameters can be found in the table below.

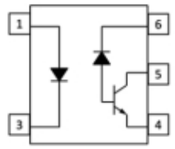
Application

- High Voltage Isolation
- Isolation in line receiver
- Ground loop elimination
- Pulse transformer replacement
- Feedback Element in Switching Mode Power Supplies
- Power transistor isolation in motor drives
- High Speed Logic Ground Isolation
- Interface between Microprocessor system computer and their peripher TTL / TTL, TTL / CMOS, TTL / LSTTL

Photo Coupler | High Speed | SOP5-DC

Unit:mm

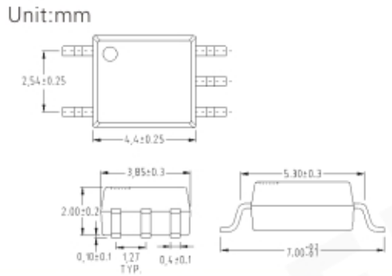


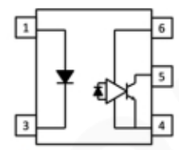


- 1: Anode
- 3: Cathode
- 4: GND
- 5: Vout
- 6: Vcc

Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	CTR(%)	Viso (Vrms)	CMR (KV/us)	IO(mA)
OR-M501	4.4 × 3.85 × 2	30 max.	800/800	20-50	3750	15 min.	8

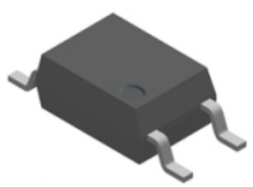
Unit:mm



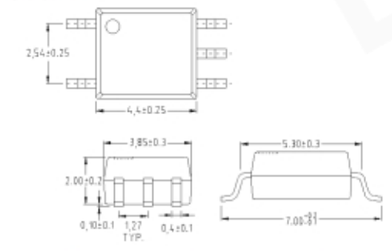


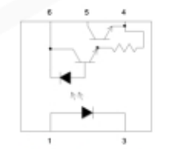
- 1: Anode
- 3: Cathode
- 4: GND
- 5: Vout
- 6: Vcc

Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	IFT (mA)	Viso (Vrms)	CMR (KV/us)	IO(mA)
OR-M601	4.4 × 3.85 × 2	7 max.	90/75	5	3750	10 min.	50 max.



Unit:mm

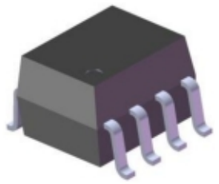




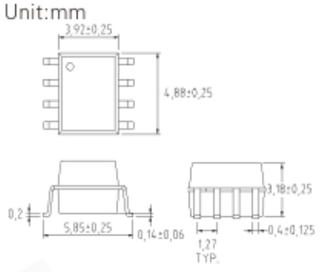
- 1: Anode
- 3: Cathode
- 4: GND
- 5: Vout
- 6: Vcc

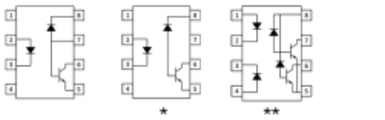
Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	CTR(%)	Viso (Vrms)	CMR (KV/us)	IO(mA)
OR-M701	4.4 × 3.85 × 2	18 max.	75/60	400-3500	3750	1 min.	60 max.

Photo Coupler | High Speed | SO8-DC



Unit:mm





- 1. No Connection
- 2. Anode
- 3. Cathode
- 4. No Connection
- 5. Gnd
- 6. Vout
- 7. VB
- 8. VCC

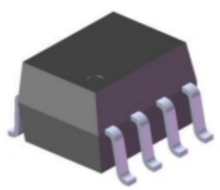
- 1. No Connection
- 2. Anode
- 3. Cathode
- 4. No Connection
- 5. Gnd
- 6. Vout
- 7. No Connection
- 8. VCC

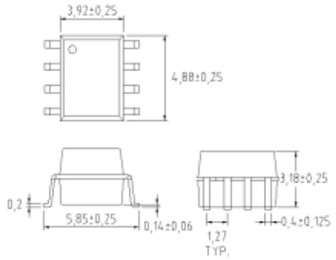
- 1. Anode
- 2. Cathode
- 3. Cathode
- 4. Anode
- 5. Gnd
- 6. Vout 2
- 7. Vout 1
- 8. VCC

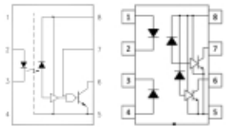
Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	CTR (%)	Viso (Vrms)	CMR (KV/us)	IO (mA)
*OR-0452	4.88 × 3.92 × 3.18	30 max.	1000 / 1000	19-50	3750	1	8
*OR-0453	4.88 × 3.92 × 3.18	30 max.	1000 / 1000	19-50	3750	15	8
OR-0500	4.88 × 3.92 × 3.18	30 max.	2000 / 2000	7-50	3750	1	8
OR-0501	4.88 × 3.92 × 3.18	30 max.	1000 / 1000	19-50	3750	1	8
OR-050L	4.88 × 3.92 × 3.18	30 max.	800 / 800	20-50	3750	15	8
**OR-0530	4.88 × 3.92 × 3.18	30 max.	2000 / 2000	7-50	3750	1	8
**OR-0531	4.88 × 3.92 × 3.18	30 max.	1000 / 1000	19-50	3750	1	8

Photo Coupler | High Speed | SO8-DC

Unit:mm







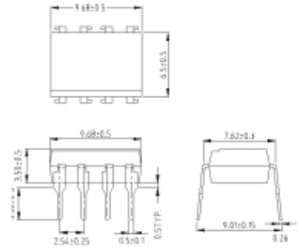
- 1, No Connection
- 2, Anode
- 3, Cathode
- 4. No Connection
- 5, Gnd
- 6, Vout
- 7, VE
- 8, VCC

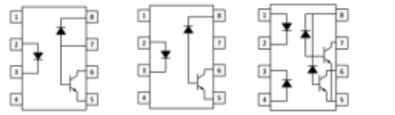
- 1. Anode
- 2. Cathode
- 3. Cathode
- 4. Anode
- 5. Gnd
- 6. Vout 2
- 7. Vout 1
- 8. VCC

Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	IFT (mA)	Viso (Vrms)	CMR (KV/us)	IO (mA)
OR-0600	4.88 × 3.92 × 3.18	30 max.	75/75	5	3750	–	50 max.
OR-0601	4.88 × 3.92 × 3.18	30 max.	75/75	5	3750	5	50 max.
OR-0611	4.88 × 3.92 × 3.18	30 max.	75/75	5	3750	10	50 max.
OR-060L	4.88 × 3.92 × 3.18	30 max.	75/75	5	3750	10	50 max.
*OR-0630	4.88 × 3.92 × 3.18	30 max.	100/100	5	3750	5	50 max.
*OR-0631	4.88 × 3.92 × 3.18	30 max.	100/100	5	3750	10	50 max.

Photo Coupler | High Speed | DIP8-DC

Unit:mm





- 1. No Connection
- 2. Anode
- 3. Cathode
- 4. No Connection
- 5. Gnd
- 6. Vout
- 7. VB
- 8. VCC

*

- 1. No Connection
- 2. Anode
- 3. Cathode
- 4. No Connection
- 5. Gnd
- 6. Vout
- 7. No Connection
- 8. VCC

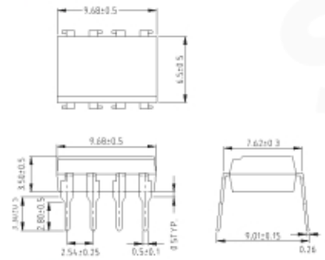
**

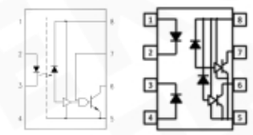
- 1. Anode
- 2. Cathode
- 3. Cathode
- 4. Anode
- 5. Gnd
- 6. Vout 2
- 7. Vout 1
- 8. VCC

Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	CTR (%)	Viso (Vrms)	CMR (KV/us)	IO (mA)
6N135	9.68×6.5×3.5	30 max.	2000 / 2000	7–50	5000	1	8
6N136	9.68×6.5×3.5	30 max.	1000 / 1000	19–50	5000	1	8
*OR–4502	9.68×6.5×3.5	30 max.	1000 / 1000	19–50	5000	1	8
*OR–4503	9.68×6.5×3.5	30 max.	1000 / 1000	19–50	5000	15	8
*OR–4504	9.68×6.5×3.5	30 max.	400 / 400	25–60	5000	15	8
**OR–2530	9.68×6.5×3.5	30 max.	2000 / 2000	7–50	5000	1	8
**OR–2531	9.68×6.5×3.5	30 max.	1000 / 1000	19–50	5000	1	8

Photo Coupler | High Speed | DIP8-DC

Unit:mm





*

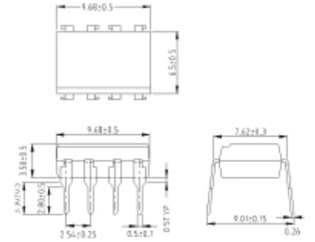
- 1. No Connection
- 2. Anode
- 3. Cathode
- 4. No Connection
- 5. Gnd
- 6. Vout
- 7. VB
- 8. VCC

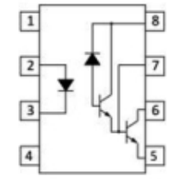
- 1. No Connection
- 2. Anode
- 3. Cathode
- 4. No Connection
- 5. Gnd
- 6. Vout
- 7. No Connection
- 8. VCC

Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	IFT (mA)	Viso (Vrms)	CMR (KV/us)	IO (mA)
6N137	9.68×6.5×3.5	7 max.	75 / 75	5	5000	–	50 max.
OR–2601	9.68×6.5×3.5	7 max.	75 / 75	5	5000	5	50 max.
OR–2611	9.68×6.5×3.5	7 max.	75 / 75	5	5000	10	50 max.
OR–260L	9.68×6.5×3.5	7 max.	75 / 75	5	5000	10	50 max.
*OR–2630	9.68×6.5×3.5	7 max.	100 / 100	5	5000	5	50 max.
*OR–2631	9.68×6.5×3.5	7 max.	100 / 100	5	5000	10	50 max.

Photo Coupler | High Speed | DIP8-DC

Unit:mm



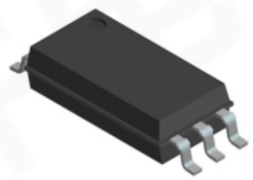


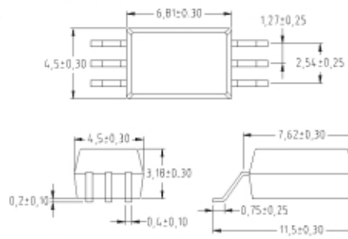
- 1. No Connection
- 2. Anode
- 3. Cathode
- 4. No Connection
- 5. Gnd
- 6. Vout
- 7. VB
- 8. VCC

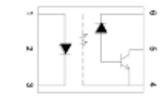
Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	CTR (%)	Viso (Vrms)	CMR (KV/us)	IO (mA)
6N138	9.68×6.5×3.5	7 max.	15000 / 50000	300 min.	5000	1	60 max.
6N139	9.68×6.5×3.5	18 max.	30000 / 90000	500 min.	5000	1	60 max.

Photo Coupler | High Speed | LSO6-DC

Unit:mm



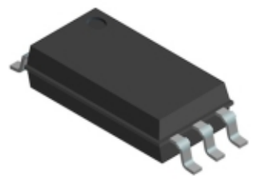


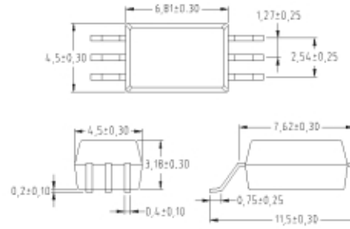


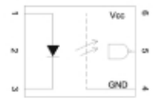
- 1. Anode
- 3. Cathode
- 4. GND
- 5. Voutput
- 6. Vcc

Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	CTR (%)	Viso (Vrms)	CMR (KV/us)	IO (mA)
OR–50L	6.81×4.5×3.18	30 max.	800 / 800	15 min.	5000	15	16 max.

Unit:mm





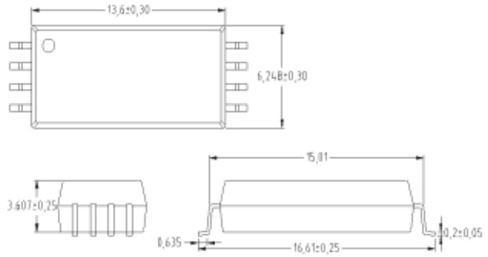


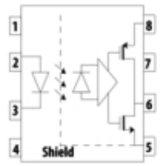
- 1. Anode
- 3. Cathode
- 4. GND
- 5. Voutput
- 6. Vcc

Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	IFT (mA)	Viso (Vrms)	CMR (KV/us)	IO (mA)
OR–60L	6.81×4.5×3.18	7 max.	75 / 90	5 min.	5000	10	50 max.

Photo Coupler | High Speed | LSO8-DC

Unit:mm



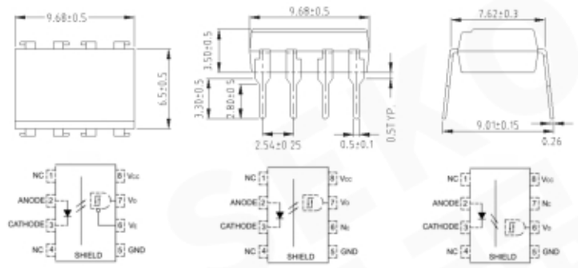


- 2. Anode
- 3. Cathode
- 5. Gnd
- 6. Vout
- 8. VCC

Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	IFT (mA)	Viso (Vrms)	CMR (KV/us)	IO (mA)
OR-H61L	1.36 × 6.248 × 3.607	20 max.	1000 / 100	3.8	7500	20	10 max.

Photo Coupler | High Speed Low Input Current | DIP8-DC

Unit:mm



Product	Size (L*W*H mm)	Supply Voltage(V)	tPHL/tPLH (ns)	IFT (mA)	Viso (Vrms)	CMR (KV/us)	IO (mA)
OR-2200	9.68 × 6.5 × 3.5	20 max.	300 / 300	1.6	5000	1	25 max.
OR-2201	9.68 × 6.5 × 3.5	20 max.	300 / 300	1.6	5000	1	25 max.
OR-2202	9.68 × 6.5 × 3.5	20 max.	300 / 300	1.6	5000	1	25 max.

Schmitt Trigger

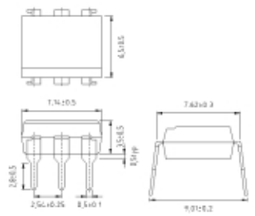
Schmitt Trigger series of devices each consist of a high-speed integrated circuit detector optically coupled to infrared emitting diode. The output incorporates a Schmitt Trigger which provides hysteresis for noise immunity and pulse shaping.

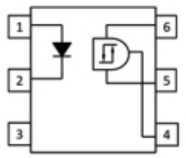
Application

- Logic to logic isolator
- Programmable current level sensor
- Line receiver—eliminate noise and transient problems
- Digital programming of power supplies
- A.C. to TTL conversion—square wave shaping
- Interfaces computers with peripherals

Photo Coupler | Schmitt Trigger | DIP6-DC

Unit:mm





- 1. Anode
- 2. Cathode
- 3. No Connection
- 4. VO
- 5. GND
- 6. VCC

Product	Size (L*W*H mm)	Supply Voltage(V)	Rise/Fall Time(us)	IFT (mA)	Viso (Vrms)	ICC_Max (mA)	IO (mA)
OR-H11L1	7.14 × 6.5 × 3.5	3-15	0.1 / 0.1	1.6	5000	5	50 max.

Triac

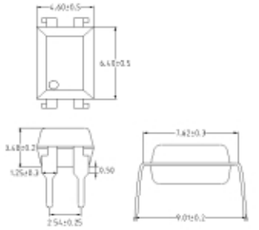
Triac Driver series of devices each consist of a GaAs infrared LED optically coupled to a monolithic photosensitive non–zero crossing triac detector chip or a monolithic photosensitive zero crossing triac detector chip. They are packaged in DIP4 / DIP6 / SOP4 Plastic body, DIP4 / DIP6 is packaged with wide–lead spacing and SMD options. Triac driver series is equipped with non zero crossing and zero crossing SCR driver outputs. The repetitive peak off state voltage Vdrm can reach a maximum of 800V. Input trigger currentift starts led required to latch output with a minimum of 3mA. All High Triac Driver series products through the German VDE and UL certification, product Operating temperature up to + 115° C. The isolation pressure between the input and output of the optocoupler can be up to 3750Vrms or 5000Vrms depending on the type of package. Detailed product parameters can be found in the table below.

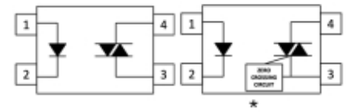
Application

- AC Motor Drives
- AC Motor Starters
- Static Power Switches
- Lighting Controls
- E.M. Contactors
- Solid State Relays
- Solenoid/Valve Controls
- Temperature Controls

Photo Coupler | Triac | DIP4–DC

Unit:mm

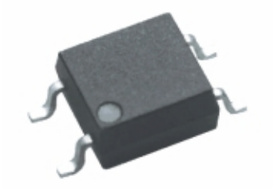




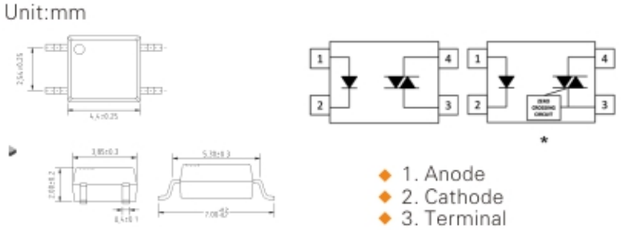
- 1. Anode
- 2. Cathode
- 3. Terminal
- 4. Terminal

Product	Size (L*W*H mm)	VTM (V)	VINH (V)	VDRM (V)	Viso (Vrms)	VF_Max (V)	IFT (mA)
OR–T3021	6.4 × 4.6 × 3.5	2.5	–	400	5000	1.5	15
OR–T3022	6.4 × 4.6 × 3.5	2.5	–	400	5000	1.5	10
OR–T3023	6.4 × 4.6 × 3.5	2.5	–	400	5000	1.5	5
OR–T3051	6.4 × 4.6 × 3.5	2.5	–	600	5000	1.5	15
OR–T3052	6.4 × 4.6 × 3.5	2.5	–	600	5000	1.5	10
OR–T3053	6.4 × 4.6 × 3.5	2.5	–	600	5000	1.5	5
*OR–T3041	6.4 × 4.6 × 3.5	3	20	400	5000	1.5	15
*OR–T3042	6.4 × 4.6 × 3.5	3	20	400	5000	1.5	10
*OR–T3043	6.4 × 4.6 × 3.5	3	20	400	5000	1.5	5
*OR–T3061	6.4 × 4.6 × 3.5	3	20	600	5000	1.5	15
*OR–T3062	6.4 × 4.6 × 3.5	3	20	600	5000	1.5	10
*OR–T3063	6.4 × 4.6 × 3.5	3	20	600	5000	1.5	5
*OR–T3081	6.4 × 4.6 × 3.5	3	20	800	5000	1.5	15
*OR–T3082	6.4 × 4.6 × 3.5	3	20	800	5000	1.5	10
*OR–T3083	6.4 × 4.6 × 3.5	3	20	800	5000	1.5	5

Photo Coupler | Triac | SOP4-DC



Unit:mm

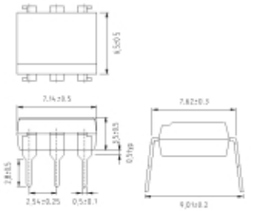


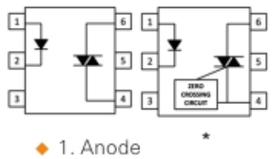
- 1. Anode
- 2. Cathode
- 3. Terminal
- 4. Terminal

Product	Size (L*W*H mm)	VTM (V)	VINH (V)	VDRM (V)	Viso (Vrms)	VF_Max (V)	IFT (mA)
OR-M3022	4.4 × 2.6 × 2	2.5	–	400	3750	1.2	10
OR-M3023	4.4 × 2.6 × 2	2.5	–	400	3750	1.2	5
OR-M3024	4.4 × 2.6 × 2	2.5	–	400	3750	1.2	3
OR-M3052	4.4 × 2.6 × 2	2.5	–	600	3750	1.2	10
OR-M3053	4.4 × 2.6 × 2	2.5	–	600	3750	1.2	5
OR-M3054	4.4 × 2.6 × 2	2.5	–	600	3750	1.2	3
*OR-M3042	4.4 × 2.6 × 2	3	20	400	3750	1.5	10
*OR-M3043	4.4 × 2.6 × 2	3	20	400	3750	1.5	5
*OR-M3044	4.4 × 2.6 × 2	3	20	400	3750	1.5	3
*OR-M3062	4.4 × 2.6 × 2	3	20	600	3750	1.5	10
*OR-M3063	4.4 × 2.6 × 2	3	20	600	3750	1.5	5
*OR-M3064	4.4 × 2.6 × 2	3	20	600	3750	1.5	3
*OR-M3082	4.4 × 2.6 × 2	3	20	800	3750	1.5	10
*OR-M3083	4.4 × 2.6 × 2	3	20	800	3750	1.5	5
*OR-M3084	4.4 × 2.6 × 2	3	20	800	3750	1.5	3

Photo Coupler | Triac | DIP6-DC

Unit:mm



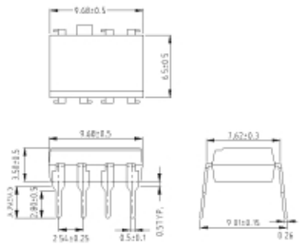


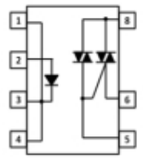
- 1. Anode
- 2. Cathode
- 3. No Connection
- 4. Terminal
- 5. Substrate(do not connect)
- 6. Terminal

Product	Size (L*W*H mm)	VTM (V)	VINH (V)	VDRM (V)	Viso (Vrms)	VF_Max (V)	IFT (mA)
OR-MOC3010	7.14 × 6.5 × 3.5	2.5	–	250	3750	1.2	15
OR-MOC3011	7.14 × 6.5 × 3.5	2.5	–	250	3750	1.2	10
OR-MOC3012	7.14 × 6.5 × 3.5	2.5	–	250	3750	1.2	5
OR-MOC3021	7.14 × 6.5 × 3.5	2.5	–	400	3750	1.2	15
OR-MOC3022	7.14 × 6.5 × 3.5	2.5	–	400	3750	1.2	10
OR-MOC3023	7.14 × 6.5 × 3.5	2.5	–	400	3750	1.2	5
OR-MOC3051	7.14 × 6.5 × 3.5	2.5	–	600	3750	1.2	15
OR-MOC3052	7.14 × 6.5 × 3.5	2.5	–	600	3750	1.2	10
OR-MOC3053	7.14 × 6.5 × 3.5	2.5	–	600	3750	1.2	5
*OR-MOC3031	7.14 × 6.5 × 3.5	3	20	250	3750	1.2	15
*OR-MOC3032	7.14 × 6.5 × 3.5	3	20	250	3750	1.2	10
*OR-MOC3033	7.14 × 6.5 × 3.5	3	20	250	3750	1.2	5
*OR-MOC3041	7.14 × 6.5 × 3.5	3	20	400	3750	1.2	15
*OR-MOC3042	7.14 × 6.5 × 3.5	3	20	400	3750	1.2	10
*OR-MOC3043	7.14 × 6.5 × 3.5	3	20	400	3750	1.2	5
*OR-MOC3061	7.14 × 6.5 × 3.5	3	20	600	3750	1.2	15
*OR-MOC3062	7.14 × 6.5 × 3.5	3	20	600	3750	1.2	10
*OR-MOC3063	7.14 × 6.5 × 3.5	3	20	600	3750	1.2	5
*OR-MOC3081	7.14 × 6.5 × 3.5	3	20	800	3750	1.2	15
*OR-MOC3082	7.14 × 6.5 × 3.5	3	20	800	3750	1.2	10
*OR-MOC3083	7.14 × 6.5 × 3.5	3	20	800	3750	1.2	5

Photo Coupler | Photo Power Triac | DIP7–DC

Unit:mm





- 2. Anode
- 1, 3, 4. Cathode
- 5. Triac Gate
- 6. Triac T1
- 8. Triac T2

Product	Size (L*W*H mm)	VTM (V)	IT (rms)(A)	VDRM (V)	Viso (Vrms)	ITSM (A)	IFT (mA)
OR–0223	9.68 × 6.5 × 3.5	2.5	0.3	600	5000	3	10
OR–1223	9.68 × 6.5 × 3.5	2.5	0.6	600	5000	6	10
OR–2223	9.68 × 6.5 × 3.5	2.5	0.9	600	5000	9	10
OR–3223	9.68 × 6.5 × 3.5	2.5	1.2	600	5000	12	10

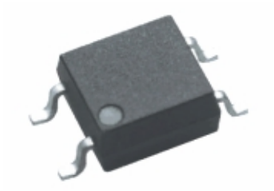
Solid State Relay

The solid state relays series photocoupler containing an AlGaAs infrared LEDs on the light emitting side (input side) optically coupled to a high voltage output detector circuit. The detector consists of a photovoltaic diode array and MOSFETs on the output side.They are packaged in DIP4\DIP6\DIP8 and available in surface mount SMD opoption. 6–pin DIP size can enable AC/DC and DC only output connections. The single channel configuration is equivalent to 1 form A EMR. At the same time, it has a dual channel solid state relays of 8–pin dip size, is configuration is equivalent to 1 form A EMR. Detailed product parameters can be found in the table below.

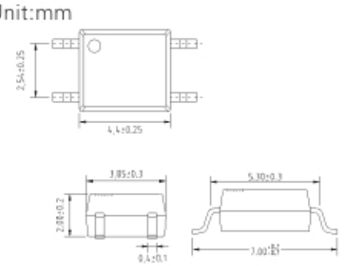
Application

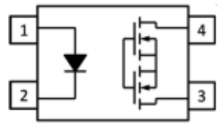
- Exchange equipment
- Measurement equipment
- FA/OA equipment
- Industrial controls
- Security

Photo Coupler | Solid State Relay | SOP4-DC



Unit:mm



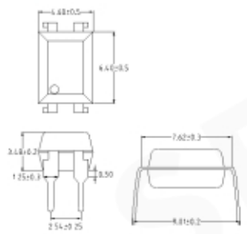


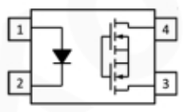
- 1. Anode
- 2. Cathode
- 3.4. Drain

Product	Size (L*W*H mm)	Output type	Load Voltage (V)	Load Current (mA)	Ron Typ. (Ω)	Ifon max. (mA)	Viso (Vrms)
OR-M440A	4.4 × 3.85 × 2	Normally Open 1 Form A	400	120	20	5	3750
OR-M460A	4.4 × 3.85 × 2	Normally Open 1 Form A	600	50	40	5	3750

Photo Coupler | Solid State Relay | DIP4-DC

Unit:mm



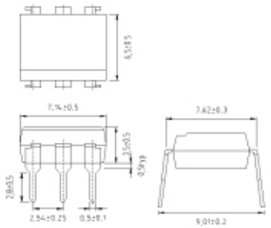


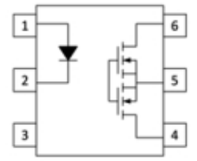
- 1. Anode
- 2. Cathode
- 3.4. Drain

Product	Size (L*W*H mm)	Output type	Load Voltage (V)	Load Current (mA)	Ron Typ. (Ω)	Ifon max. (mA)	Viso (Vrms)
OR-406A	6.4 × 4.6 × 3.5	Normally Open 1 Form A	60	550	0.75	5	5000
OR-425A	6.4 × 4.6 × 3.5	Normally Open 1 Form A	250	180	6.5	5	5000
OR-440A	6.4 × 4.6 × 3.5	Normally Open 1 Form A	400	120	20	5	5000
OR-460A	6.4 × 4.6 × 3.5	Normally Open 1 Form A	600	50	40	5	5000

Photo Coupler | Solid State Relay | DIP6-DC

Unit:mm



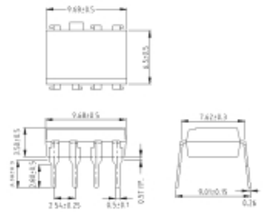


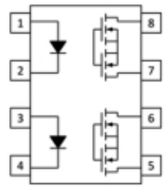
- 1. Anode
- 2. Cathode
- 4. Drain
- 5. Source
- 6. Drain

Product	Size (L*W*H mm)	Output type	Load Voltage (V)	Load Current (mA)	Ron Typ. (Ω)	Ifon max. (mA)	Viso (Vrms)
OR-606A	7.14 × 6.5 × 3.5	Normally Open 1 Form A	60	550	0.75	5	5000
OR-625A	7.14 × 6.5 × 3.5	Normally Open 1 Form A	250	180	6.5	5	5000
OR-640A	7.14 × 6.5 × 3.5	Normally Open 1 Form A	400	120	20	5	5000
OR-660A	7.14 × 6.5 × 3.5	Normally Open 1 Form A	600	50	40	5	5000

Photo Coupler | Solid State Relay | DIP8-DC

Unit:mm



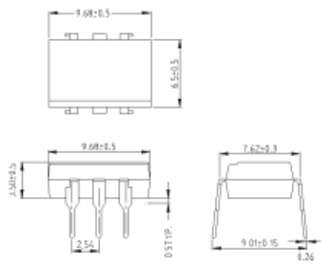


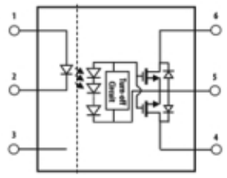
- 1. Anode
- 2. Cathode
- 3.4. Drain

Product	Size (L*W*H mm)	Output type	Load Voltage (V)	Load Current (mA)	Ron Typ. (Ω)	Ifon max. (mA)	Viso (Vrms)
OR-840A	9.68 × 6.5 × 3.5	Normally Open 2 Form A	400	120	20	5	5000
OR-860A	9.68 × 6.5 × 3.5	Normally Open 2 Form A	600	50	40	5	5000

Photo Coupler | Solid State Relay | DIP6–DC

Unit:mm





- 1, Anode
- 2, Cathode
- 4, 5, 6. Drain

Product	Size (L*W*H mm)	Output type	Load Voltage (V)	Load Current (mA)	Ron Typ. (Ω)	Ifon max. (mA)	Viso (Vrms)
OR–5211	9.68 × 6.5 × 3.5	Normally Open 1 Form A	600	120	16	5	5000

IGBT

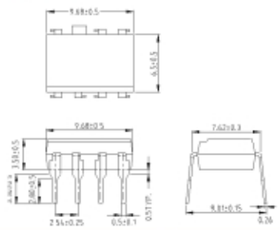
IGBT Gate Driver series Photocoupler is ideally suited for driving power IGBTs and MOSFETs used in motor control inverter applications and inverters in power supply system. It contains an AlGaAs LED optically coupled to an integrated circuit with a power output stage. The 2.5A peak output current is capable of directly driving most IGBTs with ratings up to 1200 V/100 A. For IGBTs with higher ratings, The Photocoupler operational parameters are guaranteed over the temperature range from –40℃ ~ +105℃.Detailed product parameters can be found in the table below.

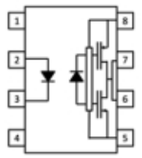
Application

- IGBT/MOSFET gate driver.
- Uninterruptible power supply (UPS)
- Industrial Inverter
- AC/Brushless Inverter
- Switching power suppliers

Photo Coupler | IGBT | DIP8-DC

Unit:mm



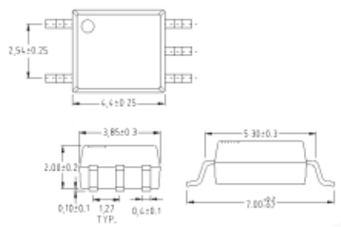


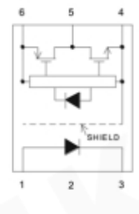
- 1. No Connection
- 2. Anode
- 3. Cathode
- 4. No Connection
- 5. Gnd
- 6. Vout
- 7. Vout
- 8. Vcc

Product	Size (L*W*H mm)	tPHL/tPLH (ns)	High Level Output Current (A)	Low Level Output Current (A)	Viso (Vrms)	CMR (KV/us)	IFT (mA)
OR-3120	9.68 × 6.5 × 3.5	300max. / 300max.	2 min.	−2 min.	5000	20	5
OR-3150	9.68 × 6.5 × 3.5	200max. / 200max.	1	1	5000	35	5

Photo Coupler | IGBT | SOP5-DC

Unit:mm

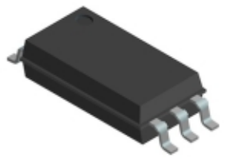




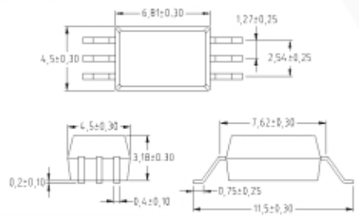
- 1.Anode
- 3.Cathode
- 4.GND
- 5.Vo(Output)
- 6.Vcc

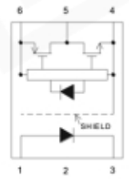
Product	Size (L*W*H mm)	tPHL/tPLH (ns)	High Level Output Current (A)	Low Level Output Current (A)	Viso (Vrms)	CMR (KV/us)	IFT (mA)
OR-155E	9.68 × 6.5 × 3.5	200max. / 200max.	1	1	3750	20	5

Photo Coupler | IGBT | LSO6-DC



Unit:mm





- 1.Anode
- 3.Cathode
- 4.GND
- 5.Vo(Output)
- 6.Vcc

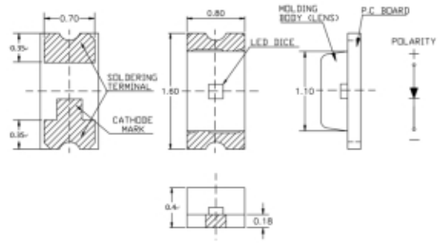
Product	Size (L*W*H mm)	tPHL/tPLH (ns)	High Level Output Current (A)	Low Level Output Current (A)	Viso (Vrms)	CMR (KV/us)	LCC (mA)
OR-W314	6.81 × 4.5 × 3.18	200max. / 200max.	0.6	0.4	3750	20	3
OR-W340	6.81 × 4.5 × 3.18	200max. / 200max.	1	0.8	3750	20	3
OR-W341	6.81 × 4.5 × 3.18	200max. / 200max.	3	2.5	3750	20	3

Optical Package

Optical Package

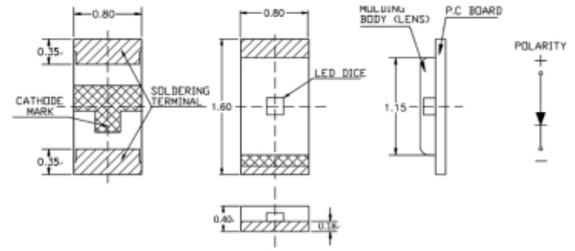
Chip LED _Top View

1.6 x 0.8 x 0.4 mm



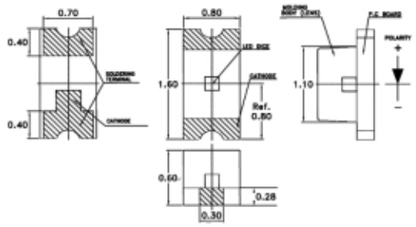
Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)
ORH-R36G	Red	630	94	120	2.0	20
ORH-YG36G	Yellow Green	570	42	120	2.0	20
ORH-G36G	True Green	520	900	120	3.0	20
ORH-B36G	Blue	467	35	120	2.85	20
ORH-W46G	White	(0.30, 0.28)	140	120	2.9	5

1.6 x 0.8 x 0.4 mm



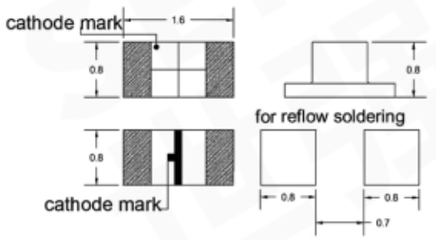
Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)
ORH-R36G-TS	Red	630	94	120	2.0	20
ORH-YG36G-TS	Yellow Green	570	42	120	2.0	20
ORH-G36G-TS	True Green	520	900	120	3.0	20
ORH-B36G-TS	Blue	467	35	120	2.85	20
ORH-W46G-TS	White	(0.30, 0.28)	140	120	2.9	5

Chip LED _Top View



1.6 x 0.8 x 0.6 mm

Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)
ORH–R36A	Red	625	94	120	2.0	20
ORH–O36A	Orange	605	130	120	2.0	20
ORH–Y36A	Yellow	590	150	120	2.0	20
ORH–YG36A	Yellow Green	572	42	120	2.0	20
ORH–G36A	True Green	521	900	120	3.0	20
ORH–B36A	Blue	467	35	120	2.85	20
ORH–W46A–J	White	(0.24, 0.23)	800	120	3.0	15

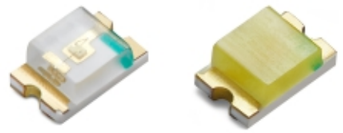


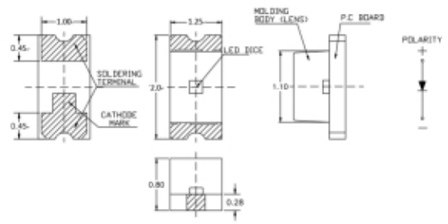
1.6 x 0.8 x 0.8 mm

Part No.	Lens Color	λ p(nm)	Typ.Radiation Intensity Ie(mW/sr)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)
ORH–I36B	Clear	940	0.8	120	1.2	20
	Clear	850	2.0	120	1.6	20

Part No.	Iceo(nA)@20V	BVceo(V) @50 μ A	BVceo(V) @500 μ A	HEFI(@VCE= 10V&IC=1mA)	Φ (deg)	λ 0.1 (nm)
ORH–T26B	<50	>7	>70	300–2000	120	470 to 1090

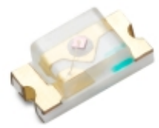
Chip LED _Top View

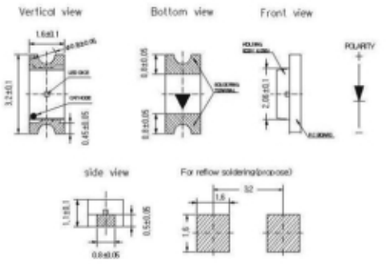




2.0 x 1.25 x 0.8 mm

Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)
ORH–R35A	Red	625	94	120	2	20
ORH–Y35A	Yellow	590	63	120	2	20
ORH–YG35A	Yellow Green	572	42	120	2	20
ORH–G35A	True Green	525	900	120	3	20
ORH–B35A	Blue	465	63	120	3.2	20
ORH–W45A	White	(0.33, 0.36)	700	120	2.9	15



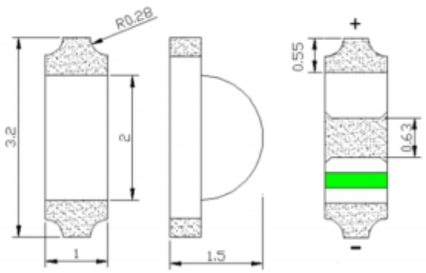


3.2 x 1.6 x 1.10 mm

Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)
ORH–R37A	Red	631	60	130	2.0	20
ORH–O37A	Orange	605	90	130	2.0	20
ORH–Y37A	Yellow	589	50	130	2.0	20
ORH–YG37A	Yellow Green	571	35	130	2.0	20
ORH–G37A	True Green	525	150	130	3.3	20
ORH–B37A	Blue	470	50	130	3.3	20
ORH–W47A	White	(0.31, 0.32)	112	130	2.9	5

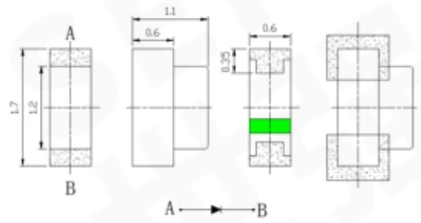
Chip LED _Top View

3.2*1.0*1.5mm(1204)



Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)
ORH-R37C	Red	631	60	130	2.0	20
ORH-O37C	Orange	605	90	130	2.0	20
ORH-Y37C	Yellow	589	50	130	2.0	20
ORH-YG37C	Yellow Green	571	35	130	2.0	20
ORH-G37C	True Green	525	150	130	3.3	20
ORH-B37C	Blue	470	50	130	3.3	20
ORH-W47C	White	(0.31, 0.32)	112	130	2.9	5

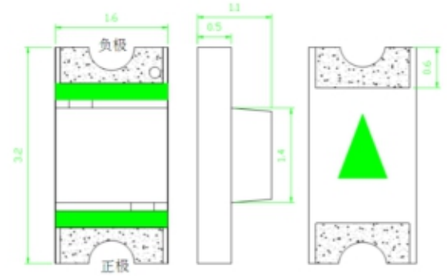
1.7*0.6*1.1mm (0602)



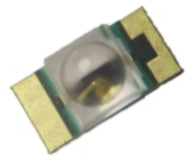
Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)
ORH-R39A	Red	631	60	120	2.0	20
ORH-O39A	Orange	605	90	120	2.0	20
ORH-Y39A	Yellow	589	50	120	2.0	20
ORH-YG39A	Yellow Green	571	35	120	2.0	20
ORH-G39A	True Green	525	150	120	3.3	20
ORH-B39A	Blue	470	50	120	3.3	20
ORH-W49A	White	(0.31, 0.32)	112	120	2.9	5

Chip LED _Top View

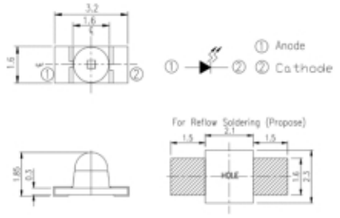
3.2 x 1.6 x 1.10 mm



Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)
ORH-R37G	Red	631	60	120	2.0	20
ORH-O37G	Orange	605	90	120	2.0	20
ORH-Y37G	Yellow	589	50	120	2.0	20
ORH-YG37G	Yellow Green	571	35	120	2.0	20
ORH-G37G	True Green	525	150	120	3.3	20
ORH-B37G	Blue	470	50	120	3.3	20
ORH-W47G	White	(0.31, 0.32)	112	120	2.9	5

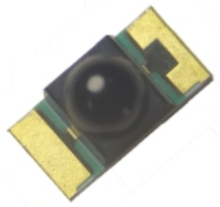


3.2 x 1.6 x 1.10 mm

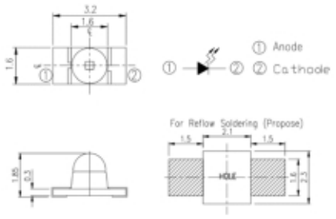


Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)
ORH-R37B	Red	631	60	20	2.0	20
ORH-O37B	Orange	605	90	20	2.0	20
ORH-Y37B	Yellow	589	50	20	2.0	20
ORH-YG37B	Yellow Green	571	35	20	2.0	20
ORH-G37B	True Green	525	150	20	3.3	20
ORH-B37B	Blue	470	50	20	3.3	20
ORH-W47B	White	(0.31, 0.32)	112	20	2.9	5

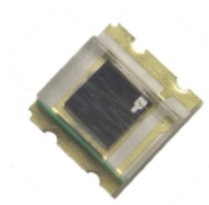
Emitter&Receiver SMDLED



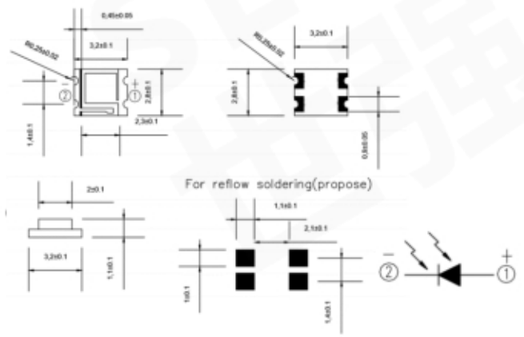
3.2 x 1.6 x 1.85 mm



Part No.	λ P(nm)	Typ.Radiation Powerle(mw/sr)	View Angle2 θ 1/2	Typ.Forward Voltage VF(V)	Forward Current IF(mA)
ORH-I37B	850or940	10-30	30	1.3	50
Part No.	TR&TF/ μ s	Rang of Spectral Bandwidth/nm	Reverse Light Current IL (Ee=1m W/cm2 λ p=940nm VR=5V) /mA	Dark Current Id(Ee=0m W/cm2 VR=10V)/nA	Total Capacitance Ct(Ee=0m W/cm2 VR=3V f=1MHZ)/pF
ORH-T27B	15	840-1100	2	100	25



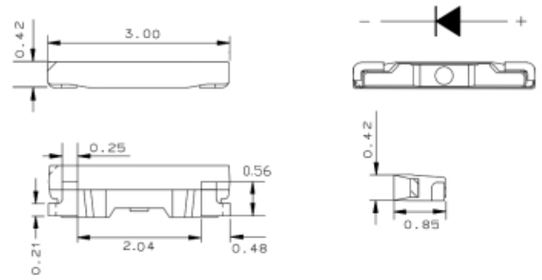
3.2*2.8*1.1mm



Part No.	Size (mm)	Rang of Spectral Bandwidth /nm	Reverse Light Current IL (Ee=1m W/cm2 λ p=940nm VR=5V) / μ A	Dark Current Id (Ee=0m W/cm2 VR=10V)/nA	Total Capacitance Ct(Ee=0m W/cm2 VR=3V f=1MHZ)/pF
ORH-PD60	3.2*2.8*1.1	840-1100	30-80	≤10	7

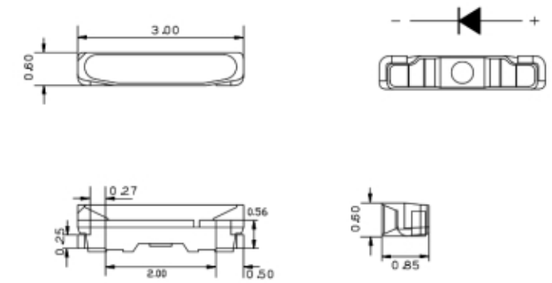
PLCC_Side View

3.0 x 0.85 x 0.42 mm



Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage VF (V)	Forward Current IF (mA)	Max.Forward Current IF(mA)
OR-PL3004W-01	White	(0.28, 0.26)	2600-2800	120	3.0	20	30
OR-PL3004W-02	White	(0.28, 0.26)	3200-3400	120	3.0	20	30
OR-PL3004W-03	White	(0.28, 0.26)	3600-3800	120	3.0	20	30

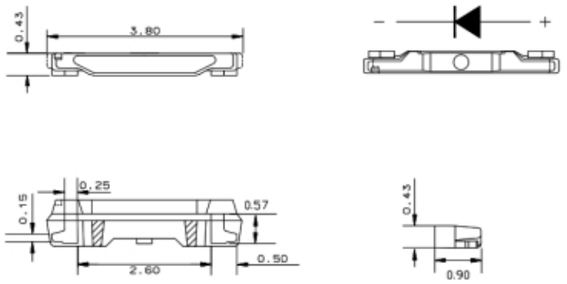
3.00 x 0.85 x 0.60 mm



Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage VF (V)	Forward Current IF (mA)	Max.Forward Current IF(mA)
OR-PL3006W-01	White	(0.28, 0.26)	2600-2800	120	3.0	20	30
OR-PL3006W-02	White	(0.28, 0.26)	3200-3400	120	3.0	20	30
OR-PL3006W-03	White	(0.28, 0.26)	3600-3800	120	3.0	20	30

PLCC_Side View

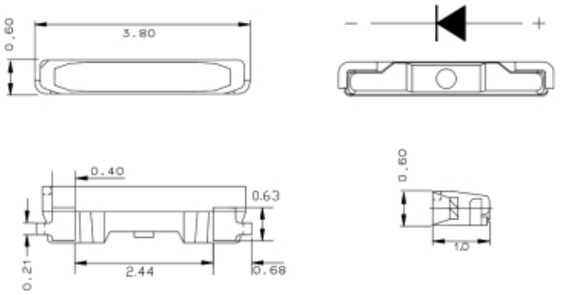
3.80 x 0.90 x 0.43 mm



Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)	Max.Forward Current I_F(mA)
OR-PL010R-01	Red	631	180	120	3.0	20	30
OR-PL010R-02	Red	620	720	120	3.0	20	30
OR-PL010O	Orange	605	180	120	3.0	20	30
OR-PL010Y	Yellow	589	280	120	3.0	20	30
OR-PL010YG	Yellow Green	571	112	120	3.0	20	30
OR-PL010G-01	True Green	525	2400	120	3.0	20	30
OR-PL010G-02	True Green	525	450	120	3.0	20	30
OR-PL010B-01	Blue	470	140	120	3.0	20	30
OR-PL010B-02	Blue	465	500	120	3.0	20	30
OR-PL010W-01	White	(0.28, 0.26)	2600-2800	120	3.0	20	30
OR-PL010W-02	White	(0.28, 0.26)	3200-3400	120	3.0	20	30
OR-PL010W-03	White	(0.28, 0.26)	3600-3800	120	3.0	20	30
OR-PL010P	Sakura Pink	(0.45, 0.26)	1700	120	3.0	20	30
OR-PL010V	Violet	(0.32, 0.19)	1700	120	3.0	20	30

PLCC_Side View

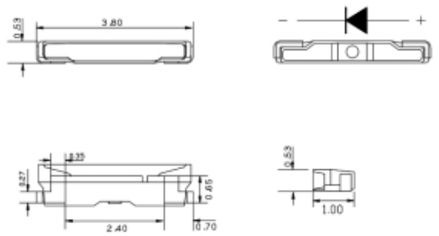
3.80 x 1.00 x 0.60 mm



Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)	Max.Forward Current I_F(mA)
OR-PL020R-01	Red	631	180	120	3.0	20	30
OR-PL020R-02	Red	620	720	120	3.0	20	30
OR-PL020O	Orange	605	180	120	3.0	20	30
OR-PL020Y	Yellow	589	280	120	3.0	20	30
OR-PL020YG	Yellow Green	571	112	120	3.0	20	30
OR-PL020G-01	True Green	525	2400	120	3.0	20	30
OR-PL020G-02	True Green	525	450	120	3.0	20	30
OR-PL020B-01	Blue	470	140	120	3.0	20	30
OR-PL020B-02	Blue	465	500	120	3.0	20	30
OR-PL020W-01	White	(0.28, 0.26)	2600-2800	120	3.0	20	30
OR-PL020W-02	White	(0.28, 0.26)	3200-3400	120	3.0	20	30
OR-PL020W-03	White	(0.28, 0.26)	3600-3800	120	3.0	20	30
OR-PL020P	Sakura Pink	(0.45, 0.26)	1700	120	3.0	20	30
OR-PL020V	Violet	(0.32, 0.19)	1700	120	3.0	20	30

PLCC_Side View

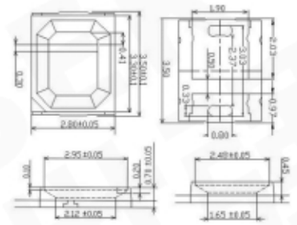
3.80 x 1.00 x 0.53mm



Part No.	Color	λ d(nm)/ CIE(x,y)	Typ. Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)	Max.Forward Current I_F(mA)
OR-PL015W-01	White	(0.28, 0.26)	2600-2800	120	3.0	20	30
OR-PL015W-02	White	(0.28, 0.26)	3200-3400	120	3.0	20	30
OR-PL015W-03	White	(0.28, 0.26)	3600-3800	120	3.0	20	30

Middle Power

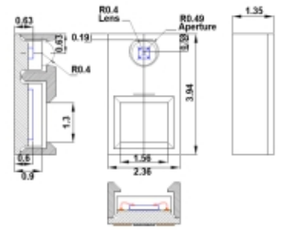
2.8 x 3.5 x 0.7 mm

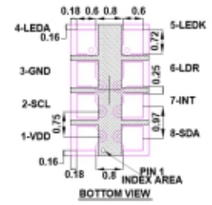


Part No.	Correlated color temperature (K)	CRI Ra (min.)	Typ.Luminous Flux Φv (lm)	View Angle 2 θ 1/2	Typ. Forward Voltage V_F (V)	Forward Current I_F (mA)	Thermal Resistance R_{th} (j-s) (° C/W)
OR-PL2835W-01	13000-16000	80	22-24	120	3.0	60	35
OR-PL2835W-02	16000-19000	80	20-22	120	3.0	60	35
OR-PL2835W-03	6000-7000	80	22-26	120	3.0	60	35
OR-PL2835W-04	4750-5250	80	24-26	120	3.0	60	35
OR-PL2835W-05	3750-4250	80	22-26	120	3.0	60	35
OR-PL2835W-06	2850-3250	80	20-24	120	3.0	60	35

Ambient light sensor+Proximity sensor

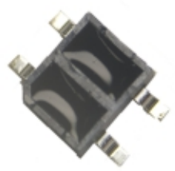
3.94 x 2.36 x 1.35 mm



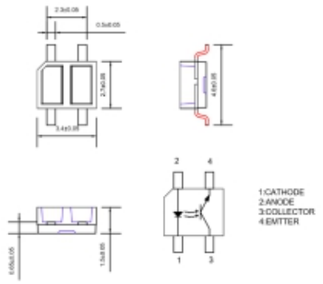


Part No.	Description	Package Type	Operating Temp (° C)	Supply Voltage (V)	Interface	Interrupt & Persist	DLS Full Scale ADC Count	Light Range	PS Full Scale ADC Count	Detection Range (mm)
OR-29044	(3-in-1) Digital Light Sensor+Proximity Sensor+IR LED	ChipLED 8 pins	-40 to+85	2.25to 3.63	I2C fast mode (400kbit/s)	Yes	16-bit ADC (linear)	0.01 lux to 64k lux	11-bit ADC(linear)	0-100

Reflective Sensor



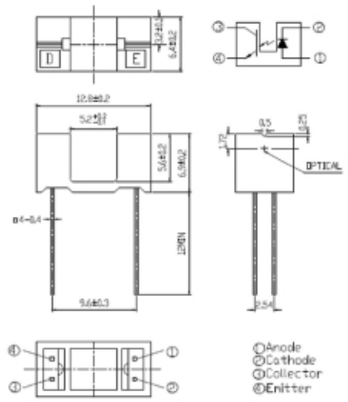
3.4 x 2.7 x 1.5 mm



Part No.	Size	VF Typ(V)	VF Max(V)	Ic(ON) Min(Ma)	Iceo Max(Na)
ORTR-8307	3.4*2.7*1.5	1.2	1.4	0.5	1000

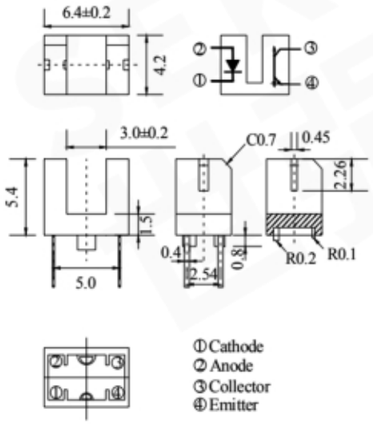
Optical Switch

ORTR-9707



Part No.	Size	VF Typ(V)	VF Max(V)	Ic(ON) Min(Ma)	Iceo Max(Na)
ORTR-9707	12.8*6.4*6.9	1.2	1.5	0.5	100

ORTR-352



Part No.	Size	VF Typ(V)	VF Max(V)	Ic(ON) Min(Ma)	Iceo Max(Na)
ORTR-352	6.4*4.2*5.4	1.2	1.6	1.0	100

Lamp LED Coding principle

ORL-(A)F(B)(C)(D)(E)XX

A: emitting color (R:red、B:blue、G:green、Y:yellow、YG:yellow green、W: white、I:infrared、D:photodiode、T:Photosensitive triode)

B: Colloid diameter (3:3mm、5:5mm)

C: emitting Angle (for example,30:30°)

D: Packaging colloid color (R:red、B:blue、G:green、Y:yellow、YG:yellow green、W: water clear)

E: wavelength (for example, 525:525nm, N: white LED)

XX: Used to distinguish between different voltage and brightness,such as 01、02、03.....

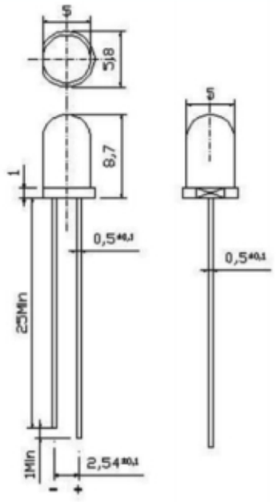
Φ3MM Lamp LED

Φ3 Lamp LED

Part No.	Color	λ d(nm)/CIE(x ,y)	Typ.Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ.Forwa rd Voltage VF(V)	Forward Current IF(mA)
ORL-BF3(C)(D)(E)XX	Blue	460-470	680-800	30	3.3	20
ORL-GF3(C)(D)(E)XX	Green	520-526	8500-25000	30	3.4	20
ORL-YGF3(C)(D)(E)XX	Yellow Green	570-576	40-150	30	2.0	20
ORL-YF3(C)(D)(E)XX	Yellow	590-596	2300-3000	30	2.4	20
ORL-RF3(C)(D)(E)XX	Red	624-633	200-2000	30	2.0	20
ORL-WF3(C)(D)(E)XX	White	(0.31,0.32)	24000-40000	30	3.4	20

Φ5 MM Lamp LED

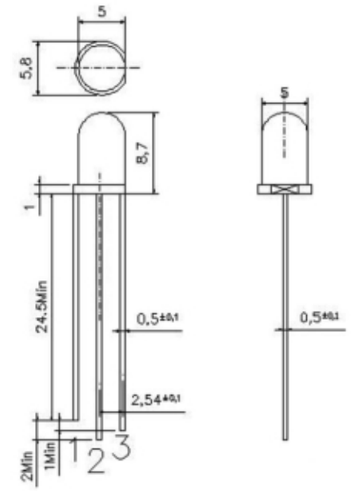
Φ5 Lamp LED



Part No.	Color	λ d(nm)/CIE(x,y)	Typ.Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ.Forward Voltage VF(V)	Forward Current IF(mA)
ORL-BF5(C)(D)(E)XX	Blue	460-470	680-800	30	3.3	20
ORL-GF5(C)(D)(E)XX	Green	520-526	8500-25000	30	3.4	20
ORL-YGF5(C)(D)(E)XX	Yellow Green	570-576	40-150	30	2.0	20
ORL-YF5(C)(D)(E)XX	Yellow	590-596	2300-3000	30	2.4	20
ORL-RF5(C)(D)(E)XX	Red	624-633	200-2000	30	2.0	20
ORL-WF5(C)(D)(E)XX	White	(0.31,0.32)	24000-40000	30	3.4	20

Φ5 MM Multicdor Lamp LED

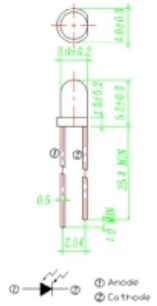
Φ5 Bicrystals&Tricrystal Lamp LED



Part No.	Color	λ d(nm)/CIE(x,y)	Typ.Luminous Intensity Iv(mcd)	View Angle 2 θ 1/2	Typ.Forward Voltage VF(V)	Forward Current IF(mA)
ORL-RGF5(C)(D)(E)XX	Red	624-633	200-2000	30	2.0	20
	Green	520-526	2000-25000	30	3.4	20
ORL-RYGF5(C)(D)(E)XX	Red	624-633	200-2000	30	2.0	20
	Yellow Green	570-576	40-150	30	2.0	20
ORL-RGBF5(C)(D)(E)XX	White	(0.31,0.32)	24000-40000	30	3.4	20

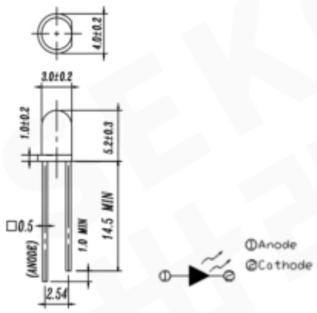
Φ3 Infrared Lamp LED

Φ3 PD Lamp LED



Part No.	Size (mm)	Rang of Spectral Bandwidth /nm	Reverse Light Current IL（Ee=1m W/cm2 λp=940nm VR=5V）/μA	Dark Current Id (Ee=0m W/cm2 VR=10V)/nA	Total Capacitance Ct(Ee=0m W/cm2 VR=3V f=1MHZ)/pF
ORL-DF3(C)(D)(E)XX	3.0 Round LAMP	840-1100	10.2-30	≤10	25

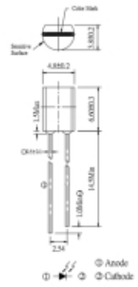
Φ3 IR Lamp LED



Part No.	Size (mm)	λp(nm)	Typ. Radiation Power Ie(mw/sr)	View Angle 2θ 1/2	Typ.Forward Voltage VF(V)	Forward Current IF(mA)
ORL-IF3(C)(D)(E)XX	3.0 Round LAMP	850 or 940	10-30	30	1.3	50

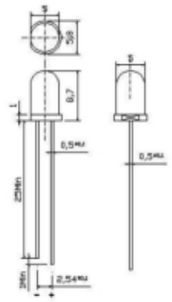
Φ5 Infrared Lamp LED

Φ5 Bicrystals&Tricrystal Lamp LED



Part No.	Size (mm)	Rang of Spectral Bandwidth /nm	Reverse Light Current IL（Ee=1m W/cm2 λp=940nm VR=5V）/μA	Dark Current Id (Ee=0m W/cm2 VR=10V)/nA	Total Capacitance Ct(Ee=0m W/cm2 VR=3V f=1MHZ)/pF
ORL-DF5(C)(D)(E)XX	5.0 Round LAMP	840-1100	10.2-30	≤10	25

Φ5 IR Lamp LED



Part No.	Size (mm)	λp(nm)	Typ. Radiation Power Ie(mw/sr)	View Angle 2θ 1/2	Typ.Forward Voltage VF(V)	Forward Current IF(mA)
ORL-IF5(C)(D)(E)XX	5.0 Round LAMP	850 or 940	10-30	30	1.3	50