



SMD 1206 LED SERIES

OF-SMD3216R RED



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



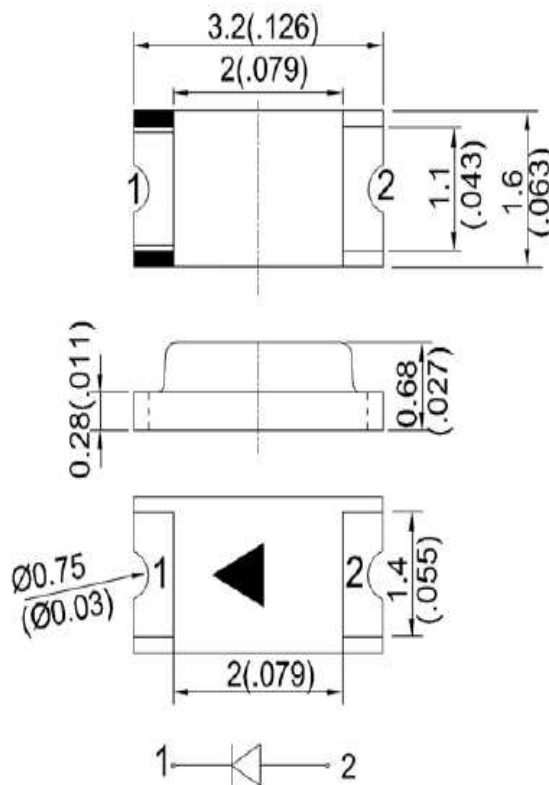
Description

The Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Red Light Emitting Diode.

Features

- 2.0mmx1.25mm SMT LED, 0.68mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 3000PCS / REEL.

Package Dimensions



Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is ± 0.2 mm unless otherwise noted.
3. An epoxy meniscus may extend about 1.5mm down the leads.
4. Burr around bottom of epoxy may be 0.5mm max..



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Selection Guide

Part. No	Dice	Lens Type	Iv(mcd) @20mA		Viewing Angle 2Θ1/2
			Min.	Typ.	
OF-SMD2012R	RED (GaAsP/GaP)	Water Clear	290	500	120°

Note:

1. Θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Device	Condition	Min	Typ	Unit
Forward Voltage DC	VF	Red	IF=20mA	1.8	2.0	V
Reverse Current	IR	All	VR=5V		5	uA
Dominant Wavelength	λD	Red	IF=20mA	623	627	nm
Capacitance	IF(rec)	Red	VF=0V; f=1MHz		35	pF

Absolute Maximum Ratings at TA=25°C

Parameter	Red	Units
Power Dissipation	65	mW
DC Forward Current	30	mA
Peak Forward Current	185	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C to +80°C	

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.

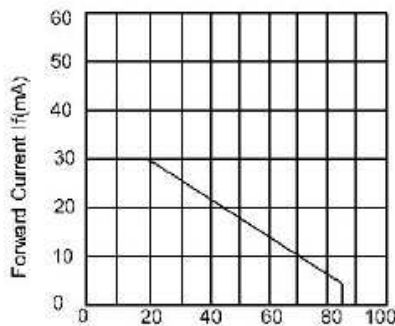


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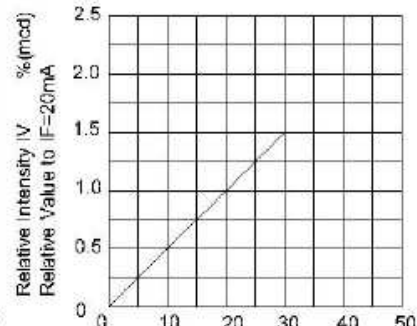
Reliability Test Items And Conditions

The reliability of products shall be satisfied with items listed below.
Confidence level :90% LTPD :10%

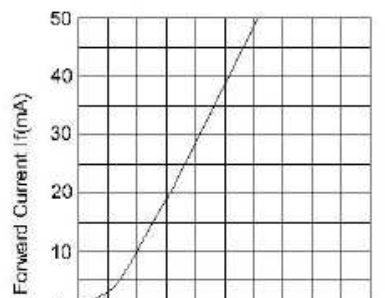
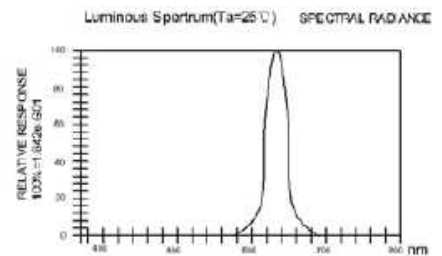
No.	Items	Test Condition	Test Hours/Cycles	Sample Size	Ac/Rc
1	Reflow	Temp:240°C±5°C Min.5 sec.	6 Min.	22Pcs.	0/1
2	Temperature Cycle	H:+100°C 15 min. ~ 5 min L:-40°C 15 min.	300 Cycles	22Pcs.	0/1
3	Thermal Shock	H:+100°C 5 min. ~ 10 sec. L:-10°C 5 min.	300 Cycles	22Pcs.	0/1
4	High Temperature Storage	Temp.:100°C	1000Hrs.	22Pcs.	0/1
5	Low Temperature Storage	Temp.: -55°C	1000Hrs.	22Pcs.	0/1
6	DC Operating Life	I _F =20mA	1000Hrs.	22Pcs.	0/1
7	High Temperature/High Humidity	85°C/R.H85%	1000Hrs.	22Pcs.	0/1



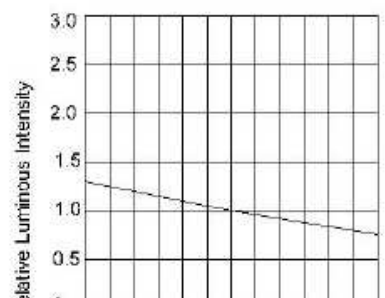
Ambient Temperature T_a(°C)
Forward current
Derating Curve



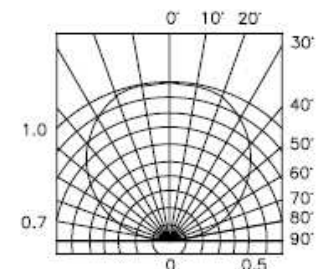
IF-Forward Current (mA)
Luminous Intensity vs.
Forward Current



Forward Voltage (V)
Forward Current VS.
Forward Voltage

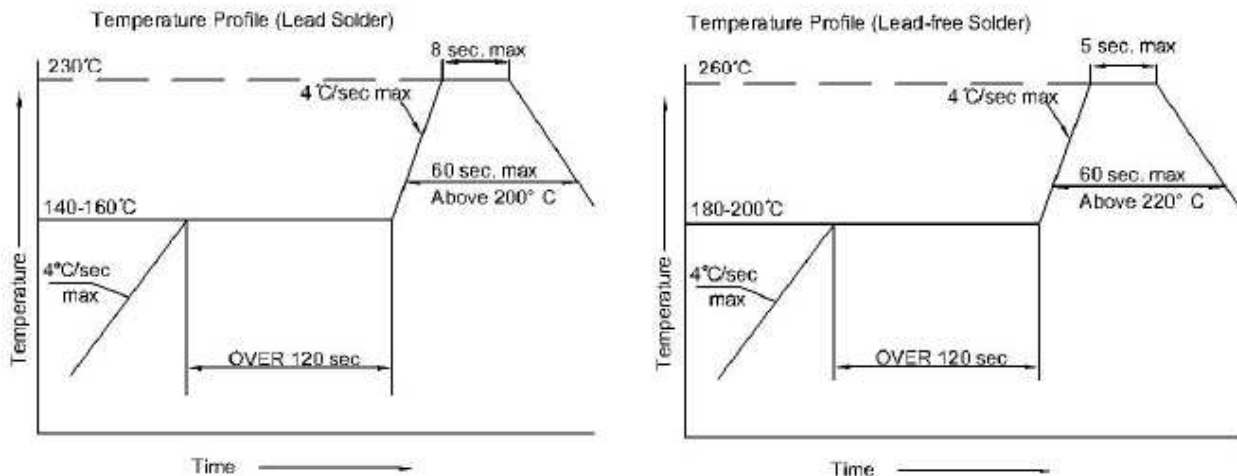


Ambient Temperature T_a(°C)
Luminous Intensity
Ambient Temperature

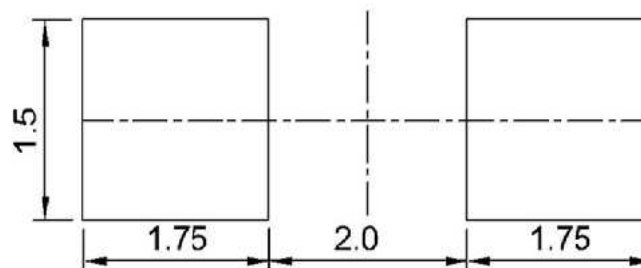


SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



Recommended Soldering Pattern (Units : mm)



Tape Specifications (Units : mm)

