Honglitronic®

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

HL-PC-3216S9AC **RED**

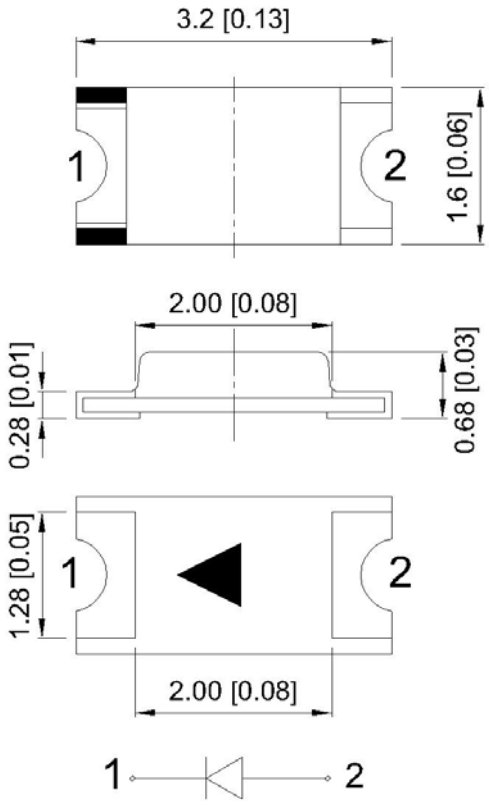
Features

- ●3.2mmx1.6mm 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.

Description

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

Package Dimensions



Notes:

1. All dimension units are millimeters.
2. All dimension tolerance is ±0.2mm unless otherwise noted.
3. An epoxy meniscus may extend about 1.5mm down the leads.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
HL-PC-3216S9AC	RED (GaP)	WATER CLEAR	70	100	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 T_A=25°C

Symbol	Parameter	Device	Min.	TYP.	Units	Test Conditions
λD	Dominate Wavelength	Red	625	630	nm	I_F=20mA
C	Capacitance	Red		15	pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Red	1.6	1.9	V	I_F=20mA
I_R	Reverse Current	Red	—	5	uA	V_R= 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	RED	Units
Power dissipation	65	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	

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

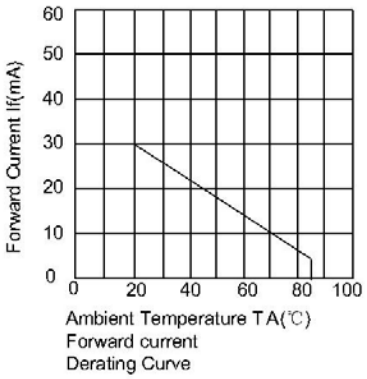
RED HL-PC-3216S9AC

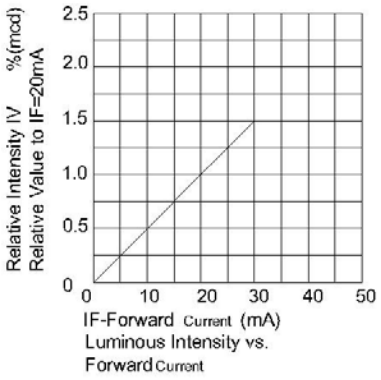
Reliability Test Items And Conditions

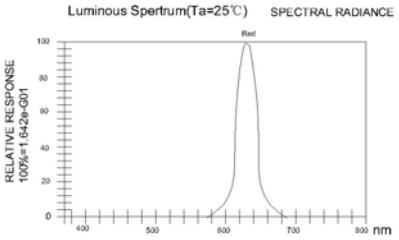
The reliability of products shall be satisfied with items listed below.
Confidence level :90% LTPD :10%

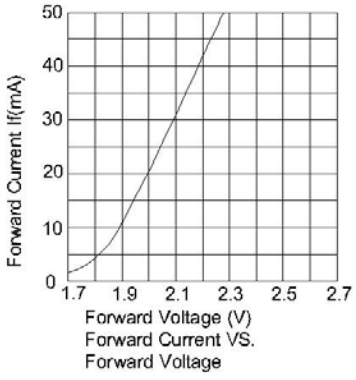
No.	Items	Test Condition	Test Hours/Cycles	Sample Size	Ac/Rc
1	Reflow	Temp:260℃max T=5 sec max.	1times.	22Pcs.	0/1
2	Temperature Cycle	100℃±5℃ 30 min. ↑↓5 min -40℃±5℃ 30 min.	100 Cycles	22Pcs.	0/1
3	Thermal Shock	100℃±5℃ 5 min. ↑↓ -40℃±5℃ 5 min.	100 Cycles	22Pcs.	0/1
4	High Temperature Storage	Temp.:100℃±5℃	1000Hrs.	22Pcs.	0/1
5	Low Temperature Storage	Temp.:-40℃±5℃	1000Hrs.	22Pcs.	0/1
6	DC Operating Life	Ta=25℃±5℃ IF=20mA	1000Hrs.	22Pcs.	0/1
7	High Temperature/High Humidity	85℃±5℃/ 85%RH IF=5mA	1000Hrs.	22Pcs.	0/1

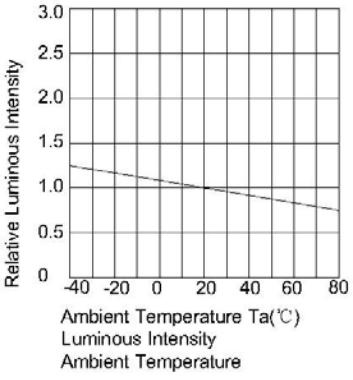
*The technical information shown in the data sheets are limited to the typical characteristics and circuit examples of the referenced products. It does not constitute the warranting of industrial property nor the granting of any license.

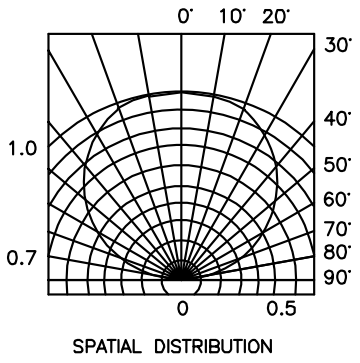












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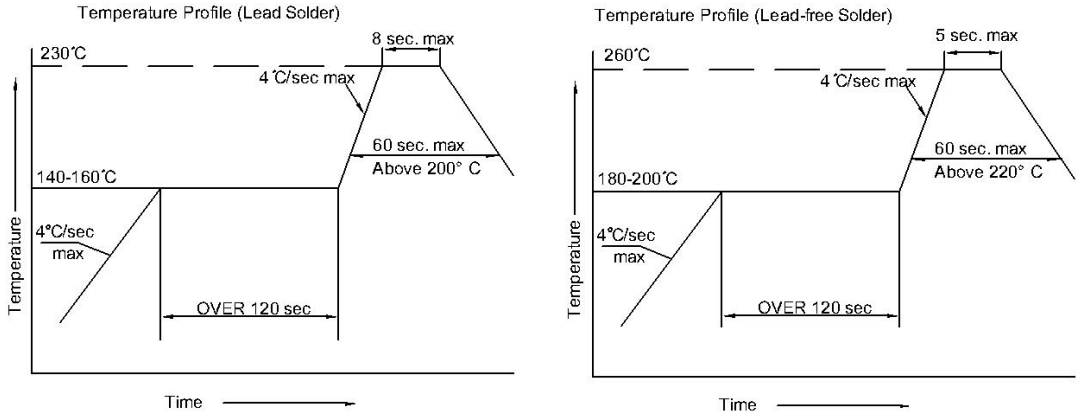
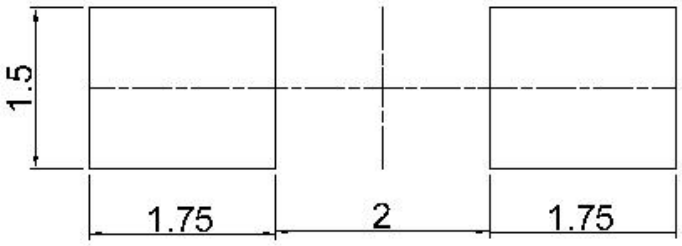
SMT Reflow Soldering Instructions

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)