

SML10R3KH-TR

Ultra Red

Surface Mount LED

3.2 × 1.6 × 1.1 mm Chip LED

120° viewing angle

DWG BY:
KB / GP
08-08-12

CHK BY:
PL
08-09-12

REVISION LTR: -
ECR#080612-SY01
08-08-12

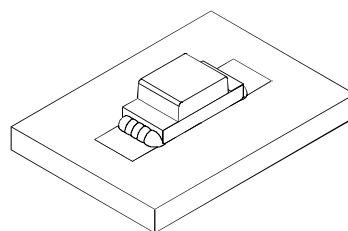
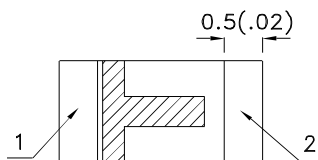
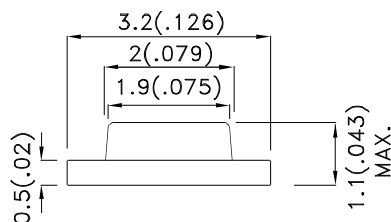
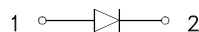
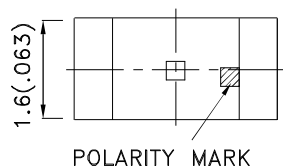
Features

- 3.2mmx1.6mm SMT LED, 1.1mm thickness.
- Low power consumption.
- Wide viewing angle.
- Ideal for backlight and indicator.
- Various colors and lens types available.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

The Ultra Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.2(0.0079)$ unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.

Dice	Lens Type	Iv (mcd) [2] @ 20mA		Viewing Angle [1]
		Min.	Typ.	2θ1/2
Ultra Red (GaAlAs)	WATER CLEAR	-	30	120°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	typ.	max.	Units	Test Condition
λpeak	Peak Wavelength	655		nm	IF=20mA
λD [1]	Dominant Wavelength	640		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	22		nm	IF=20mA
C	Capacitance	45		pF	IF=0V;f=1MHz
VF [2]	Forward Voltage	1.85	2.5	V	IF=20mA
IR	Reverse Current		10	uA	VR=5V
x	Chromaticity Coordinates	0.72			IF=20mA
y		0.28			

Notes:

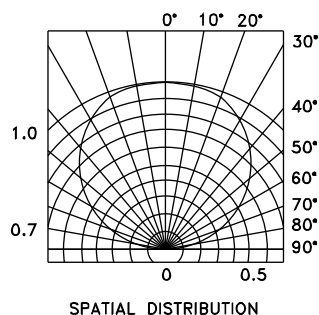
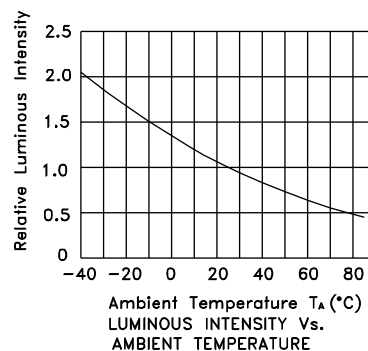
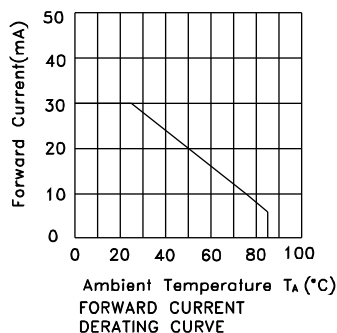
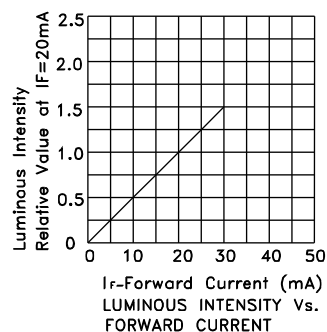
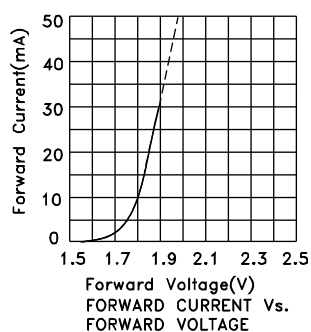
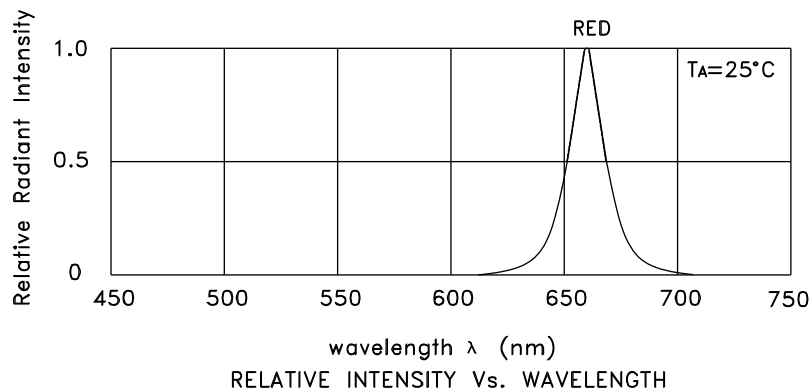
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

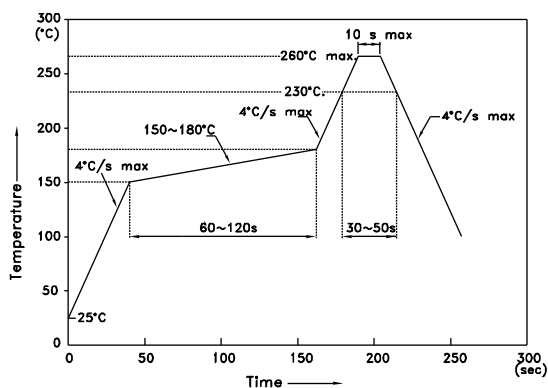
Parameter	Rating	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	155	mA
Reverse Voltage	5	V
Operating Temperature	-40°C To +85°C	
Storage Temperature	-40°C To +85°C	

Note:

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



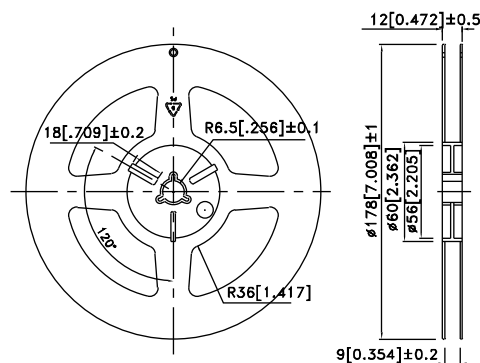
Reflow Soldering Profile For Lead-free SMT Process.



NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.

Reel Dimension



Tape

