LEDTRONICS, INC.®

23105 Kashiwa Court, Torrance, CA 90505
Phone: (800) 579-4875 or (310) 534-1505 Fax: (310) 534-1424
E-mail: webmaster@ledtronics.com
Website: http://www.ledtronics.com

SML0603-881-TR

Infrared
Surface Mount LED
1.6 ×0.8 ×0.8mm Chip LED
140° viewing angle

DWG BY: SL / GP 04-19-13
R&D: BJ 04-24-13
QA: RD 04-24-13
REVISION LTR: - ECR#: 041513-RTD01 04-19-13

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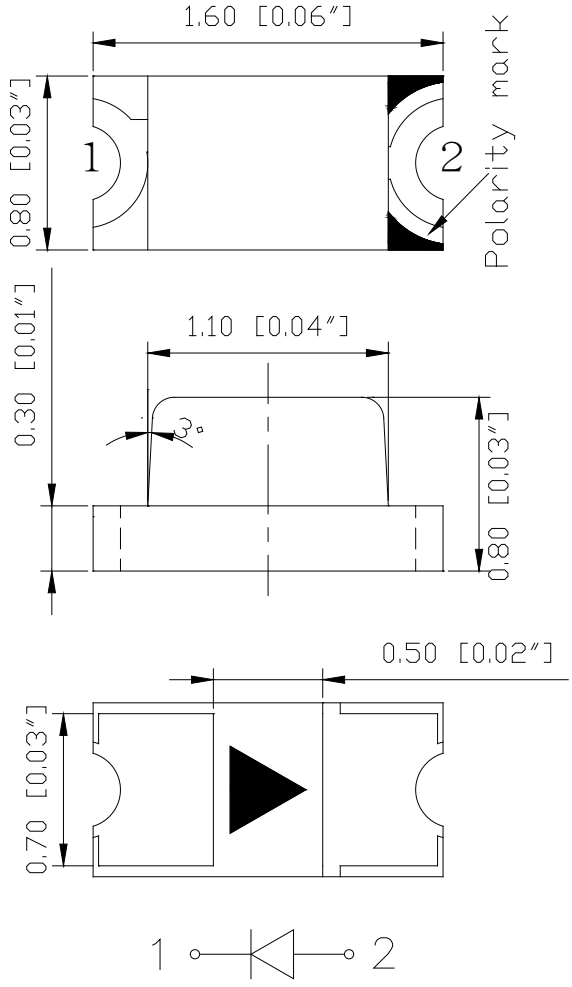
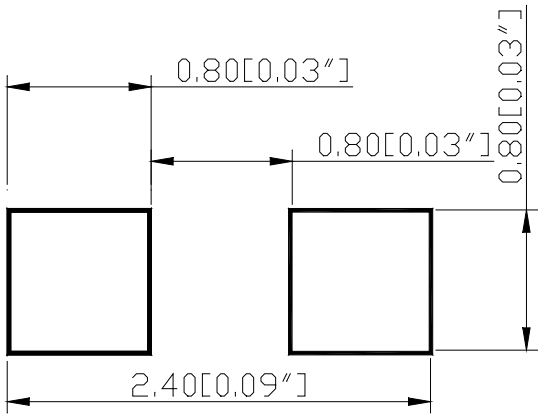
Package outlines



RECOMMEND PAD LAYOUT



ITEM	MATERIALS
Resin (mold)	Epoxy
Lens color	Water transparent
Dice	GaAlAs/GaAlAs

NOTES:
1. All dimensions are in Millimeters (Inches).
2. Tolerance are ±0.2mm (0.008inch) unless otherwise noted.

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Absolute maximum ratings (T_A=25℃)

Parameter	Symbol	Value	Unit
Power dissipation	Pd	95	mW
Peak forward current Pulse width 100μs, duty cycle =1%	Ifp	1	A
Continuous forward current	If	50	mA
Reverse voltage	Vr	5	V
Operating temperature range	Top	-40 ~+80	℃
Storage temperature range	Tstg	-40 ~+85	℃

Electro-optical characteristics (T_A=25℃)

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Radiant incidence ✳1	If=20mA	Ee	--	0.35	--	mW/cm²
Forward voltage	If=20mA	Vf	--	1.40	1.90	V
Reverse current	Vr=5V	Ir	--	--	10	μA
Peak wavelength	If=20mA	λp	--	880	--	nm
Spectral bandwidth	If=20mA	△λ	--	70	--	nm
View angle	If=10mA	2θ 1/2	--	140	--	Deg

✳1 Note: Radiant incidence tolerance is ±10%

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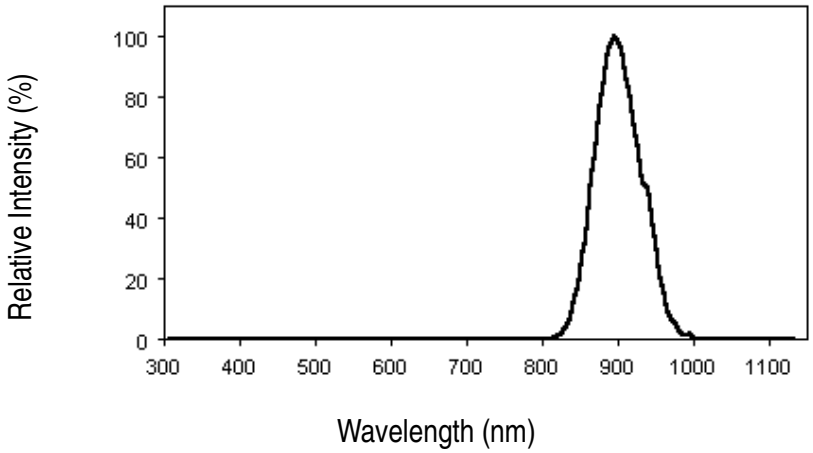
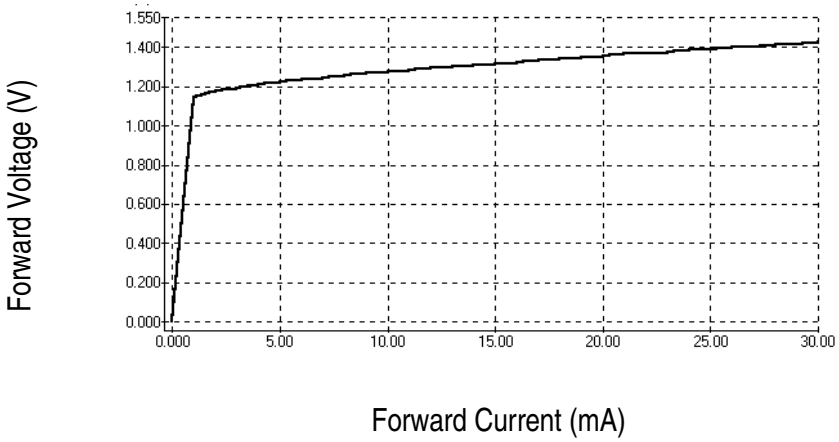
OPTICAL CHARACTERISTIC CURVES

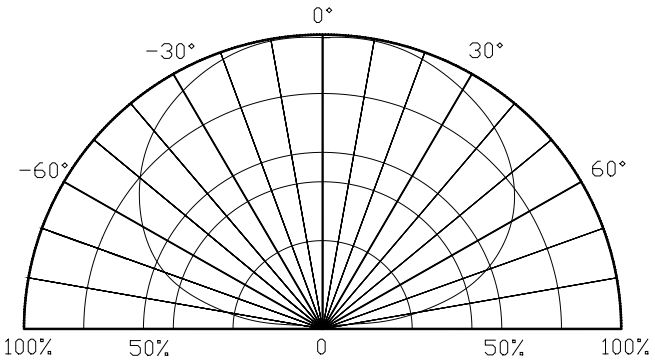
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage



Directive Characteristics



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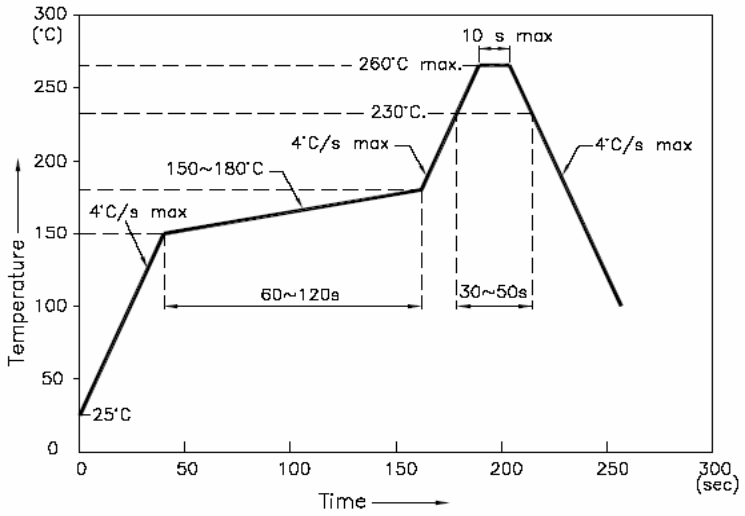
Reflow Profile

■ Solder Reflow



NOTES:

1. Recommended reflow temperature 245°C(±5°C).The soldering temperature should be limited to 260°C max.
2. Dont stress or scratch the epoxy resin while it is exposed to high temperature.
3. Recommended max. number of reflow cycles=1.
4. Allow for gradual coolin. Avoid quenching.

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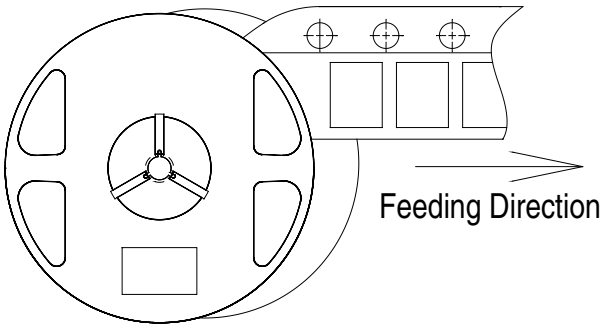
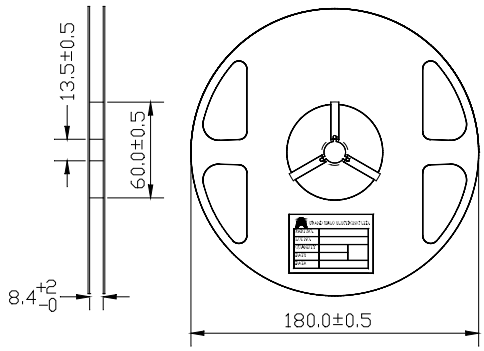
0603 Series SMD Chip LED Lamps Packaging Specifications

- **Feeding Direction**



- **Dimensions of Reel (Unit: mm)**



- **Dimensions of Tape (Unit: mm)**