

TO-2013BC-MRLE

Surface Mount Device LED

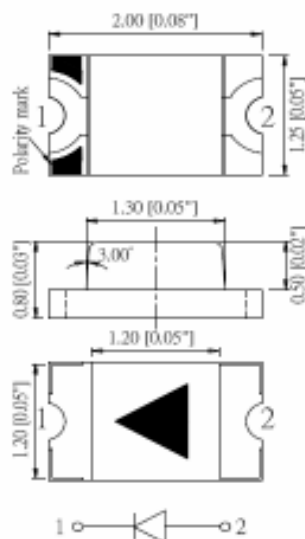
Part Number	Chip		Lens Color
	Material	Source Color	
TO-2013BC-MRLE	AlGaInP	Red	Water clear

Features

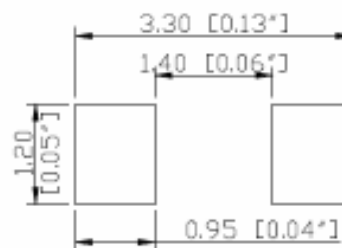
- IC compatible
- Compatible with automatic placement equipment
- Compatible with infrared and vapor phase reflow soldering process
- Top view type
- Pack in 8 mm tape on 7" diameter reel
- RoHS compliant
- Moisture sensitivity Level: level 3

Dimensions

Package outlines



Recommend Pad Layout



Notes:

1. All dimensions are in millimeter.
2. Tolerance is ± 0.1 mm unless individual mark noted.

Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	80	mA
Power Dissipation	75	mW
Continuous Forward Current	25	mA
Reverse Voltage	5	V
Operating Temperature Range	-55°C to +85°C	
Storage Temperature Range	-55°C to +105°C	
IR Reflow Soldering Profile For Lead Free Soldering	260°C	

Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	51		146	mcd	I _F =20mA
Viewing Angle	2θ _{1/2}		10		deg	I _F =20mA
Forward Voltage	V _F		1.9		V	I _F =20mA
Dominant Wavelength	λ _d		640		nm	I _F =20mA
Spectral Line Half-Width	Δλ		15		nm	I _F =20mA
Reverse Current	I _R			10	μA	V _R =5V

Bin Code List for Reference

Luminous Intensity		Unit : mcd@20mA
Bin Code	Min	Max
E1	51	66
E2	66	86
E3	86	112
E4	112	146

Tolerance of Luminous Intensity on each bin is $\pm 15\%$