

# TO-2013BC-MAG-N

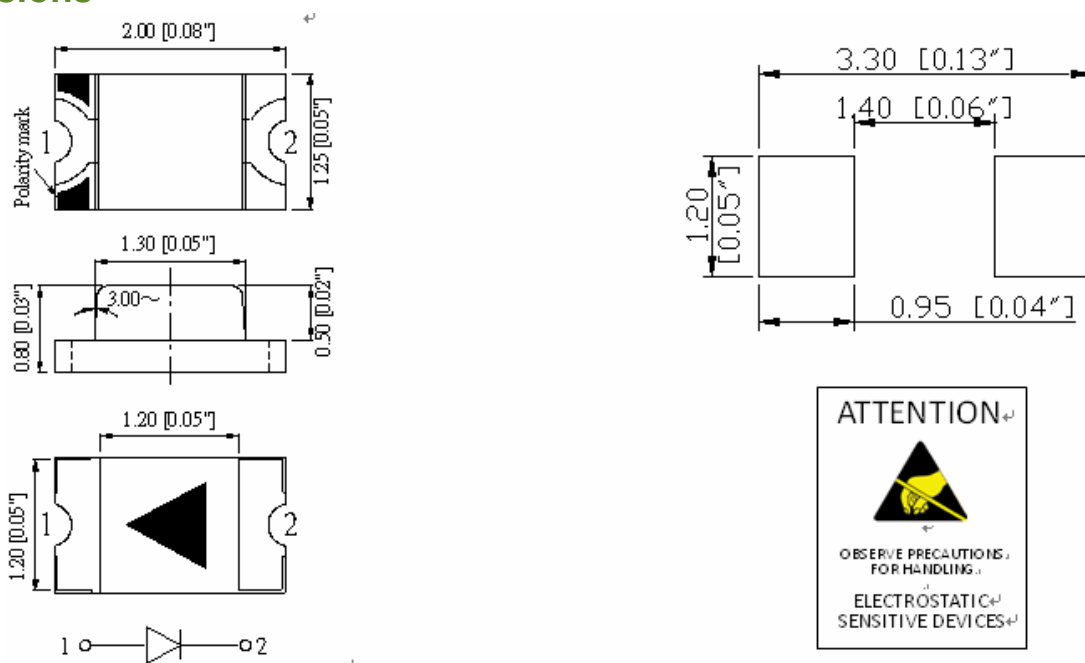
## Surface Mount Device LED

Part Number	Chip		Lens Color
	Material	Source Color	
TO-2013BC-MAG-N	AlGaInP	High Bright Amber	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



#### Notes:

1. All dimensions are in millimeter.
2. Tolerance is  $\pm 0.1$ 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	-40°C to +80°C	
Storage Temperature Range	-40°C to +100°C	
IR Reflow Soldering Profile For Lead Free Soldering	260°C for 10sec	

### Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>	417		917	mcd	I <sub>F</sub> =20mA
Viewing Angle	2θ <sub>1/2</sub>		120		deg	I <sub>F</sub> =20mA
Forward Voltage	V <sub>F</sub>		2.0	2.4	V	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		605		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		18		nm	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>			10	μA	V <sub>R</sub> =5V

## Bin Code List for Reference

Luminous Intensity		Unit : mcd@20mA
Bin Code	Min	Max
G1	417	542
G2	542	705
G3	705	917

Tolerance of Luminous Intensity on each bin is  $\pm 11\%$

Dominant Wavelength		Unit : nm@20mA
Bin Code	Min	Max
600	600	603
603	603	606
606	606	609
609	609	612

Tolerance of Dominant Wavelength on each bin is  $\pm 1\text{nm}$

Forward Voltage		Unit : V@20mA
Bin Code	Min	Max
V1.8	1.8	1.9
V1.9	1.9	2.0
V2.0	2.0	2.1
V2.1	2.1	2.2
V2.2	2.2	2.3
V2.3	2.3	2.4

Tolerance for each Forward Voltage Bin is  $\pm 0.1\text{V}$