

TO-B0603BY-MWE-5-001

Surface Mount Device LED

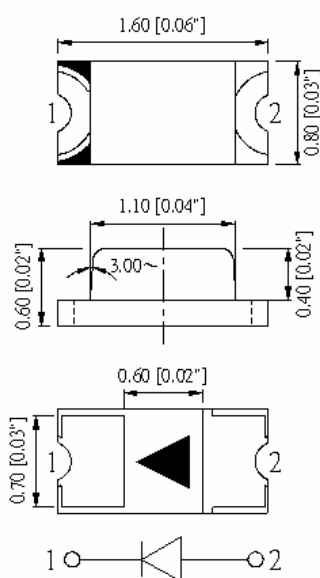
Part Number	Chip		Lens Color
	Material	Source Color	
TO-B0603BY-MWE-5-001	InGaN	Ultra White	Yellow Diffused

Features

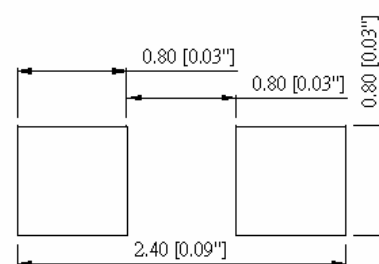
- IC compatible
- Compatible with automatic placement equipment
- Compatible with infrared and vapor phase reflow solder process
- Top view type
- Package in 8 mm tape on 7" diameter reel
- RoHS compliant
- Moisture sensitivity level: level 3

Dimensions

Package outlines



Recommend Pad Layout



Notes:

1. All dimensions are in millimeters.
2. Tolerance is ± 0.1 mm unless otherwise 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	105	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 10 sec	

Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I _v	149		315	mcd	I _F =5mA
Viewing Angle	2θ _{1/2}		150		deg	I _F =5mA
Forward Voltage	V _F		2.8		V	I _F =5mA
Reverse Current	I _R			10	mA	V _R =5V
Color Temperature	T _c		8000		K	I _F =5 mA
Chromaticity Coordinates	X		0.30			I _F =5 mA
Chromaticity Coordinates	Y		0.29			I _F =5 mA

Bin Code List for Reference

Luminous Intensity		Unit : mcd@5mA
Bin Code	Min	Max
149~179	149	179
179~215	179	215
215~258	215	258
258~315	258	315

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

Forward Voltage		& Unit : V@5mA
Bin Code	Min	Max
27	2.6	2.7
28	2.7	2.8
29	2.8	2.9
30	2.9	3.0
31	3.0	3.1
32	3.1	3.2
33	3.2	3.3
34	3.3	3.4

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

Color Bins

A4-3					
x	0.303	0.301	0.307	0.309	0.303
y	0.299	0.309	0.315	0.305	0.299
A4-2					
x	0.298	0.294	0.301	0.303	0.298
y	0.293	0.302	0.309	0.299	0.293
A4-1					
x	0.292	0.287	0.294	0.298	0.292
y	0.286	0.295	0.302	0.293	0.286
A3-3					
x	0.306	0.303	0.309	0.311	0.306
y	0.288	0.299	0.305	0.294	0.288
A3-2					
x	0.301	0.298	0.303	0.306	0.301
y	0.282	0.293	0.299	0.288	0.282
A3-1					
x	0.296	0.292	0.298	0.301	0.296
y	0.276	0.286	0.293	0.282	0.276
A2-4					
x	0.287	0.283	0.287	0.292	0.287
y	0.279	0.288	0.295	0.286	0.279
A2-3					
x	0.292	0.287	0.292	0.296	0.292
y	0.269	0.279	0.286	0.276	0.269
A2-2					
x	0.283	0.278	0.283	0.287	0.283
y	0.271	0.279	0.288	0.279	0.271

A2-1					
x	0.288	0.283	0.287	0.292	0.288
y	0.262	0.271	0.279	0.269	0.262

