

TO-1608BY-MWF-E-5

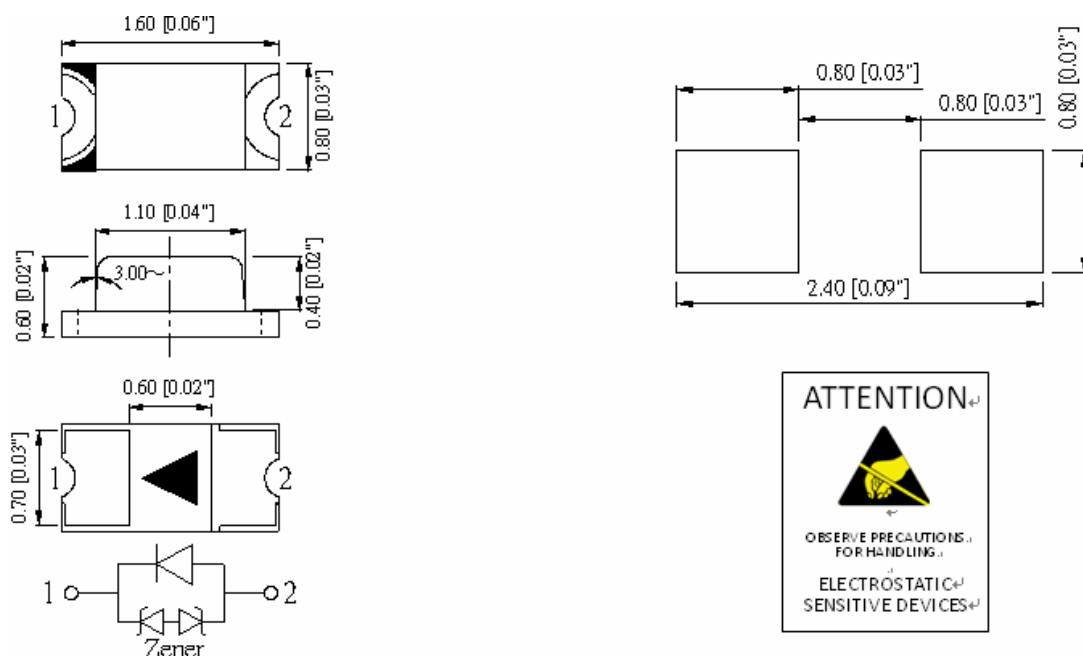
Surface Mount Device LED

Part Number	Chip		Lens Color
	Material	Source Color	
TO-1608BY-MWF-E-5	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



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	-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	146		417	mcd	I _F =5mA
Viewing Angle	2θ _{1/2}		120		deg	I _F =5mA
Forward Voltage	V _F		2.9		V	I _F =5mA
Reverse Current	I _R			10	μA	V _R =5V
Color Temperature	T _c		8000		K	I _F =5mA
Chromaticity Coordinates	X		0.30			I _F =5mA
Chromaticity Coordinates	Y		0.29			I _F =5mA

Bin Code List for Reference

Luminous Intensity		Unit : mcd@5mA
Bin Code	Min	Max
F1	146	190
F2	190	247
F3	247	321
F4	321	417

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

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

A1					
X	0.28	0.268	0.278	0.288	0.28
Y	0.248	0.262	0.279	0.262	0.248
A2					
X	0.288	0.278	0.287	0.296	0.288
Y	0.262	0.279	0.295	0.276	0.262
A3					
X	0.296	0.292	0.309	0.311	0.296
Y	0.276	0.286	0.305	0.294	0.276
A4					
X	0.292	0.287	0.307	0.309	0.292
Y	0.286	0.295	0.315	0.305	0.286
A5					
X	0.311	0.309	0.33	0.33	0.311
Y	0.294	0.305	0.329	0.318	0.294
A6					
X	X	0.309	0.307	0.33	0.33
Y	Y	0.305	0.315	0.339	0.329

