

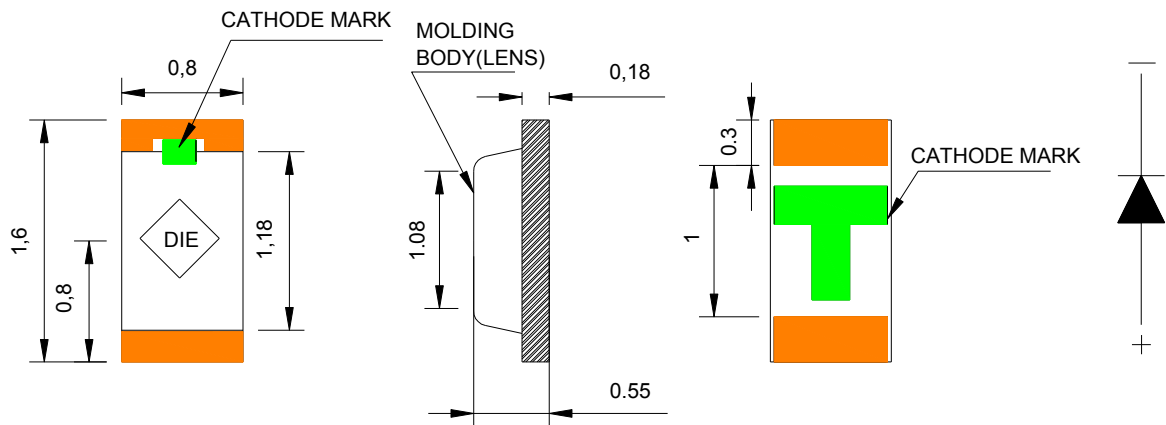


## **TO-B0603BC-MRE** **Surface Mount Device LED**

### **Features**

- IC compatible.
- Compatible with automatic placement equipment.
- Compatible with infrared and vapor phase Reflow solder process.
- Top View TYPE.
- Package in 8mm tape on 7" diameter reel.
- Lead-Free Package (According to RoHS).

### **Package Dimensions**



### **Note:**

1. All dimensions are in millimeters.
2. Tolerance is  $\pm 0.1$ mm unless otherwise noted



### Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

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 Characteristics at $T_A=25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_v$	51		146	mcd	$I_F=20\text{mA}$
Viewing Angle	$2\theta_{1/2}$		130		deg	$I_F=20\text{mA}$
Dominant Wavelength	$\lambda_d$		630		nm	$I_F=20\text{mA}$
Spectral Line Half-Width	$\Delta\lambda$		15		nm	$I_F=20\text{mA}$
Forward Voltage	$V_F$		1.9	2.3	V	$I_F=20\text{mA}$
Reverse Current	$I_R$			10	$\mu\text{A}$	$V_R=8\text{V}$

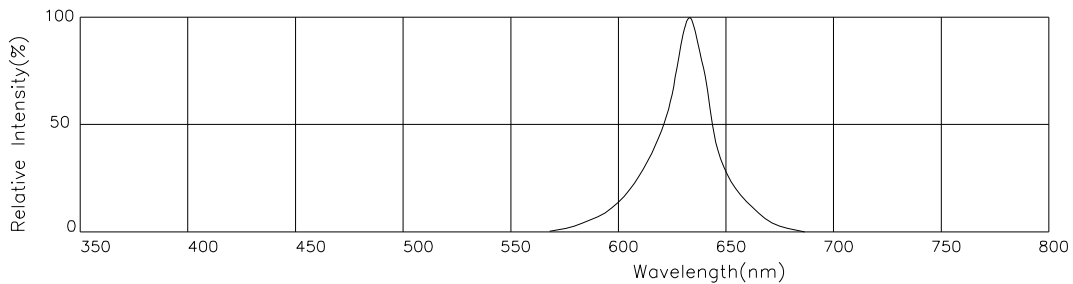
### BIN CODE LIST

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

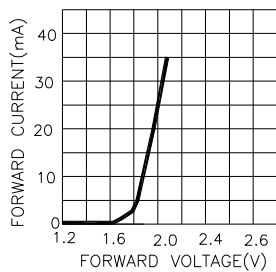
Tolerance on each Intensity Bin is  $\pm 15\%$



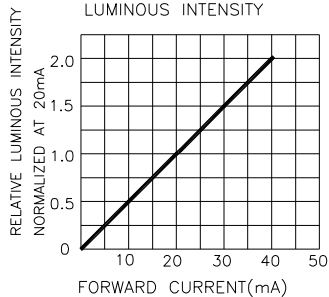
## Typical Electrical / Optical Characteristics Curves



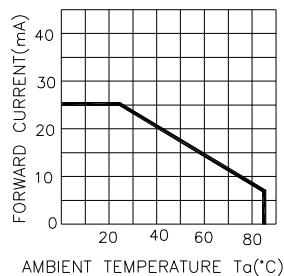
FORWARD CURRENT VS FORWARD VOLTAGE



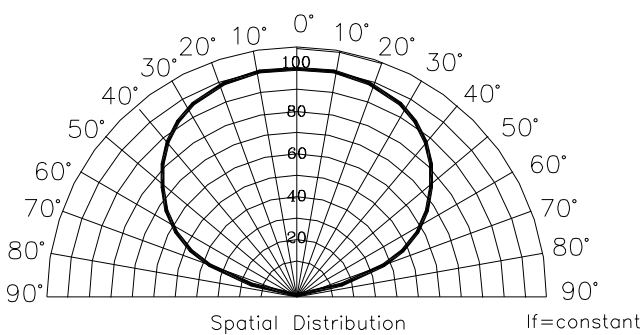
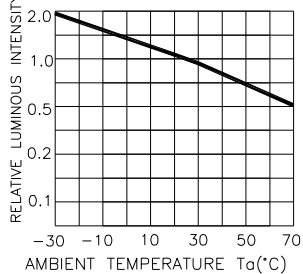
FORWARD CURRENT VS LUMINOUS INTENSITY



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY VS AMBIENT TEMPERATURE



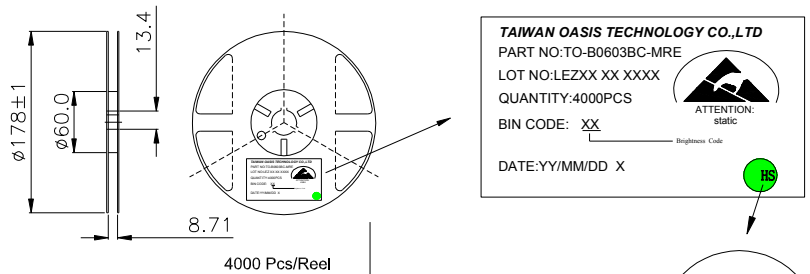
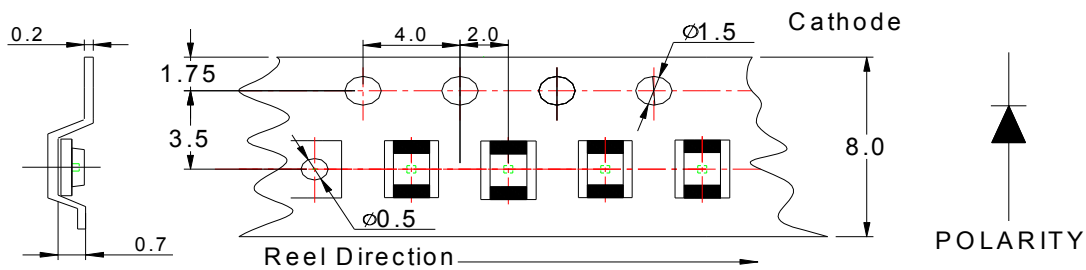


# TAIWAN OASIS

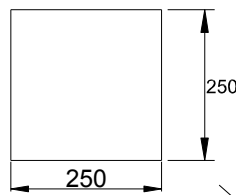
Http://www.taiwanoasis.com.tw

# Technical Data

Package Dimensions of Tape and Reel (Units: mm)



4000 Pcs/Reel



Side Green

