

### DESCRIPTION:

The 224 Ultra Bright series is conventional 3mm LED Lamps utilizing higher intensity materials to achieve superior performance.

The semi-conductor materials used are:

GaAlAs for (224UR3C/UR3D)

AlGaInP for (224UIC/UID, 224RS2C/RS2D, 224SYGC/SYGD, 224UO2C/UO2D, 224UY2C/UY2D)

### ABSOLUTE MAXIMUM RATINGS: (Ta=25°C)

Reverse Voltage	5 Volt
Reverse Current (Vr =5V)	100µA
Operating Temperature Range	-40°C To 85°C
Storage Temperature Range	-40°C To 100°C
Lead Soldering Temperature (1.6mm (1/16)From Body)	260°C For 5 Seconds

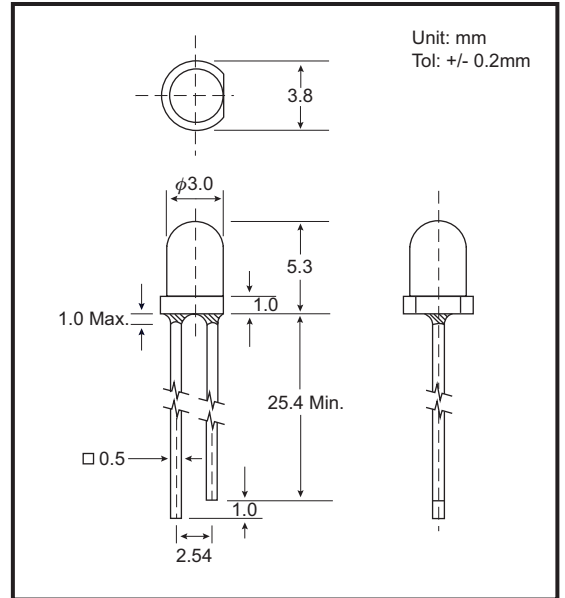
NOTES : 1. All dimensions are in millimeters.

2. Lead spacing is measured where the leads emerge from the package.

3. Protuded resin under flange is 1.5 mm (0.059") Max.

4. Specifications are subject to change without notice.

### PACKAGE DIMENSIONS



### PART NO. SELECTION AND APPLICATION INFORMATION (RATINGS AT 25°C AMBIENT)

Part No.	Emitted Color	Lens Color	Peak Wavelength λp (nm)	Vf (v)		Rec. If (mA).	Iv (mcd)		View Angle 2θ1/2(Deg)
				Min	Max		Min	Typ.	
GB-224UID	Ultra Red	Red Diffused	640	1.7	2.6	10-20	175.0	250.0	35
GB-224RS2D	Ultra Red	Red Diffused	635	1.7	2.6	10-20	700.0	1000.0	35
GB-224UR3D	Ultra Red	Red Diffused	660	1.7	2.6	10-20	350.0	500.0	35
GB-224SG2D	Ultra Green	Green Diffused	570	1.7	2.6	10-20	60.0	80.0	35
GB-224UY2D	Ultra Yellow	Yellow Diffused	590	1.7	2.6	10-20	320.0	450.0	35
GB-224UO2D	Ultra Orange	Orange Diffused	620	1.7	2.6	10-20	300.0	420.0	35
GB-224UIC	Ultra Red	Water Clear	640	1.7	2.6	10-20	700.0	1000.0	18
GB-224RS2C	Ultra Red	Water Clear	635	1.7	2.6	10-20	1400.0	2000.0	18
GB-224UR3C	Ultra Red	Water Clear	660	1.7	2.6	10-20	700.0	1000.0	18
GB-224SG2C	Ultra Green	Water Clear	570	1.7	2.6	10-20	800.0	100.0	18
GB-224UY2C	Ultra Yellow	Water Clear	590	1.7	2.6	10-20	1050.0	1500.0	18
GB-224UO2C	Ultra Orange	Water Clear	620	1.7	2.6	10-20	500.0	700.0	18

### TESTING CONDITION FOR EACH PARAMETER :

PARAMETER:	SYMBOL	UNIT	TEST CONDITION
REVERSE VOLTAGE	Vr	VOLT	Vr = 5.0 Volt
REVERSE CURRENT	Ir	µA	If = 20mA
FORWARD VOLTAGE	Vf	VOLT	If = 20mA
LUMINOUS INTENSITY	Iv	MCD	If = 20mA
VIEWING ANGLE	2θ1/2	DEGREE	
RECOMMENDED OPERATING CURRENT	If (Rec)	mA	

