

DESCRIPTION:

The 313 series is general purpose LED Lamps with 4.8mm diameter package and without flange.

The semi-conductor materials used are:

GaP for (313HD/HT, 313GC/GD/GT)

GaAsP/GaP for (313RHC/RHD/RHT, 313YC/YD/YT and 313SD)

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

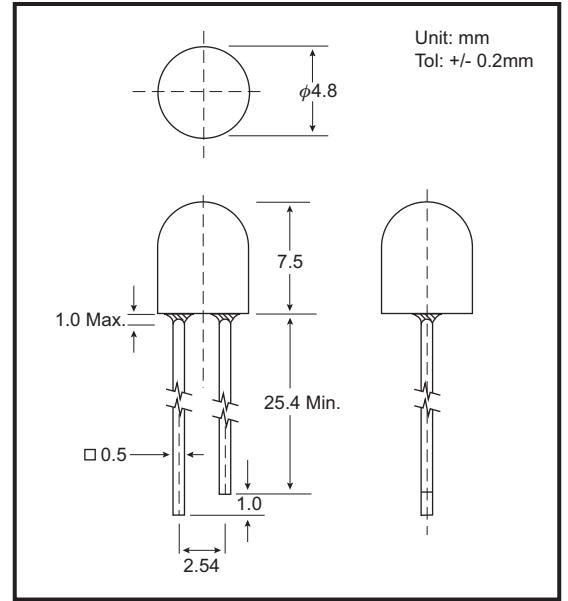
NOTES : 1. All dimensions are in millimeters.

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 λ_p (nm)	Vf (v)		Rec. If (mA).	Iv (mcd)		View Angle $2\theta_{1/2}$ (Deg)
				Min	Max		Min	Typ.	
GB-313HD	Red	Red Diffused	697	1.7	2.6	5-10	1.0	3.0	60
GB-313RHD	Bright Red	Red Diffused	660	1.7	2.6	10-20	2.5	10.0	60
GB-313GD	Green	Green Diffused	565	1.7	2.6	10-20	2.5	10.0	60
GB-313YD	Yellow	Yellow Diffused	585	1.7	2.6	10-20	2.5	10.0	60
GB-313SD	Orange	Orange Diffused	610	1.7	2.6	10-20	2.5	10.0	60
GB-313HT	Red	Red Trans.	697	1.7	2.6	5-10	1.0	15.0	45
GB-313RHT	Bright Red	Red Trans.	660	1.7	2.6	10-20	6.0	30.0	45
GB-313GT	Green	Green Trans.	565	1.7	2.6	10-20	6.0	30.0	45
GB-313YT	Yellow	Yellow Trans.	585	1.7	2.6	10-20	6.0	30.0	45
GB-313RHC	Bright Red	Water Clear	660	1.7	2.6	10-20	6.0	30.0	45
GB-313GC	Green	Water Clear	565	1.7	2.6	10-20	6.0	30.0	45
GB-313YC	Yellow	Water Clear	585	1.7	2.6	10-20	6.0	30.0	45

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	$2\theta_{1/2}$	DEGREE	
RECOMMENDED OPERATING CURRENT	If (Rec)	mA	

