

DESCRIPTION:

The 393 series is solid state lamps encapsulated in 4.7mm diameter package and is suitable for narrow angle requirement.

The semi-conductor materials used are:

GaP for (393HD/HT, 393GC/GD/GT)

GaAsP/GaP for (393RHC/RHD/RHT, 393YC/YD/YT and 393SD)

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	260°C For 5 Seconds
(1.6mm (1/16)From Body)	

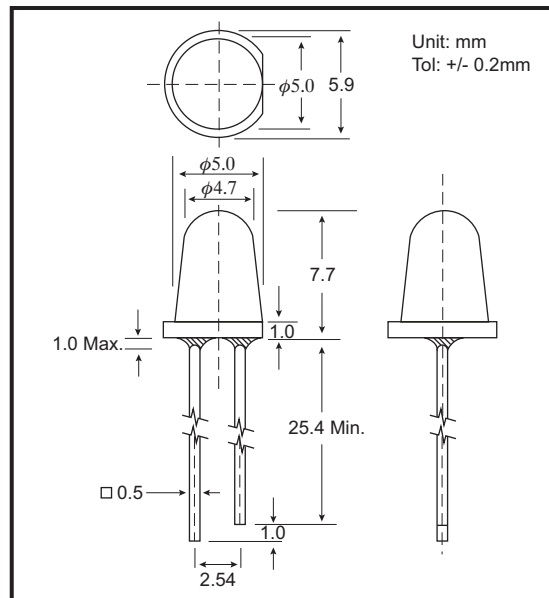
NOTES : 1. All dimensions are in millimeters.

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-393HD	Red	Red Diffused	697	1.7	2.6	5-10	1.1	3.3	20
GB-393RHD	Bright Red	Red Diffused	660	1.7	2.6	10-20	2.8	11.0	20
GB-393GD	Green	Green Diffused	565	1.7	2.6	10-20	2.8	11.0	20
GB-393YD	Yellow	Yellow Diffused	585	1.7	2.6	10-20	2.8	11.0	20
GB-393SD	Orange	Orange Diffused	610	1.7	2.6	10-20	2.8	11.0	20
GB-393HT	Red	Red Trans.	697	1.7	2.6	5-10	1.8	18.0	8
GB-393RHT	Bright Red	Red Trans.	660	1.7	2.6	10-20	4.6	18.0	8
GB-393GT	Green	Green Trans.	565	1.7	2.6	10-20	4.6	18.0	8
GB-393YT	Yellow	Yellow Trans.	585	1.7	2.6	10-20	4.6	18.0	8
GB-393RHC	Bright Red	Water Clear	660	1.7	2.6	10-20	4.6	18.0	8
GB-393GC	Green	Water Clear	565	1.7	2.6	10-20	4.6	18.0	8
GB-393YC	Yellow	Water Clear	585	1.7	2.6	10-20	4.6	18.0	8

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	

