

**DESCRIPTION:**

The R333 series of 5 volt and 12 volt lamps contain an integral current limiting resistor in series with the LED. This allows the lamp to be driven from a 5v/12v source without an external current limiter.

GaP for (R333HD-5V/12V, R333GD-5V/12V)

GaAsP/GaP for (R333YD-5V/12V, R333SD-5V/12V)

GaAlAs for (R333RHD-5V/12V, R333HR3D-5V/12V)

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

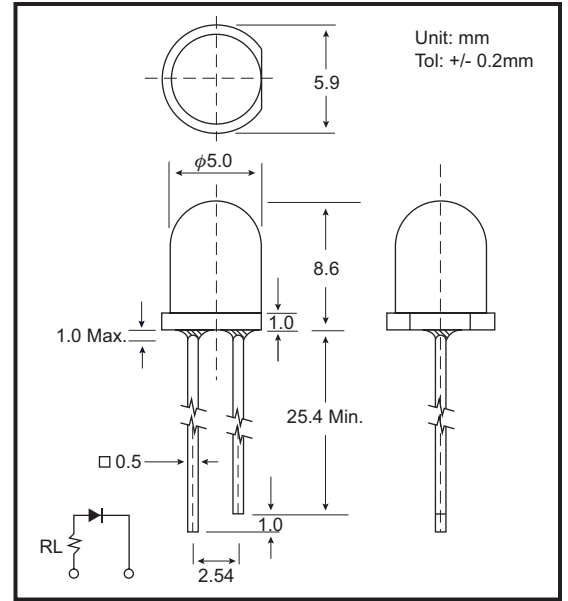
Reverse Voltage	5 Volt
Reverse Current (Vr =5V)	100µA
Operating Temperature Range	-40°C To 85°C
Storage Temperature Range	-40°C To 100°C
Lead Soldering Temperature (1.6mm (1/16)From Body)	260°C For 5 Seconds

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)	Operating Voltage (V)		Forward Current (mA)		Iv (mcd)		View Angle 2θ1/2(Deg)
				Min	Max	Min	Max	Min	Typ	Typ
GB-R333HD-5V	Red	Red Diffused	697	5	8	10	20	1.1	3.7	36
GB-R333GD-5V	Green	Green Diffused	565	5	8	10	20	5.6	19.0	36
GB-R333YD-5V	Yellow	Yellow Diffused	585	5	8	10	20	5.6	19.0	36
GB-R333SD-5V	Orange	Orange Diffused	610	5	8	10	20	5.6	19.0	36
GB-R333RHD-5V	Bright Red	Red Diffused	660	5	8	10	20	5.6	19.0	36
GB-R333HR3D-5V	Super Red	Red Diffused	660	5	8	10	20	8.7	29.0	36
GB-R333HD-12V	Red	Red Diffused	697	12	20	10	20	1.1	3.7	36
GB-R333GD-12V	Green	Green Diffused	565	12	20	10	20	5.6	19.0	36
GB-R333YD-12V	Yellow	Yellow Diffused	585	12	20	10	20	5.6	19.0	36
GB-R333SD-12V	Orange	Orange Diffused	610	12	20	10	20	5.6	19.0	36
GB-R333RHD-12V	Bright Red	Red Diffused	660	12	20	10	20	5.6	19.0	36
GB-R333HR3D-12V	Super Red	Red Diffused	660	12	20	10	20	8.7	29.0	36

**TESTING CONDITION FOR EACH PARAMETER :**

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

