

T-1(3mm) SUPER BRIGHT LED LAMPS

SUPER BRIGHT GREEN LMG32x

SUPER BRIGHT RED LMR32x



❖ Features

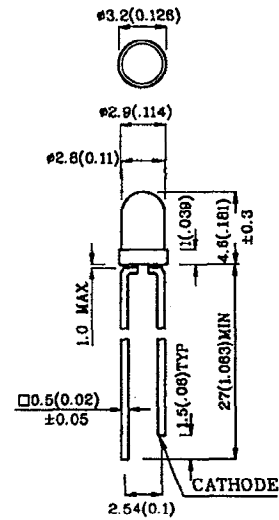
- ULTRA BRIGHTNESS.
- BOTH DIFFUSED AND WATER CLEAR LENS ARE AVAILABLE.
- OUTSTANDING MATERIAL EFFICIENCY
- RELIABLE AND RUGGED.
- IC COMPATIBLE/LOW CURRENT CAPABILITY.

❖ Description

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

❖ Dimensions



- Notes:
1. All dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.

❖ Selection Guide

Part No.	Dice	Case-Color	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Max.	
LMR32DB LMR32DC LMR32DD LMR32DE LMR32DF LMR32DG	SUPER BRIGHT RED (GaAlAs)	RED DIFFUSED	70 90 100 200 300 400	90 100 200 300 400 600	60°
LMR32WB LMR32WC LMR32WD LMR32WE LMR32WF LMR32WG	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	250 360 500 700 1000 1200	360 500 700 1000 1200 1400	50°
LMG32D	SUPER BRIGHT GREEN (GaP)	GREEN DIFFUSED	40	60	60°
LMG32W	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	100	300	50°

Note:
1. $\theta/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

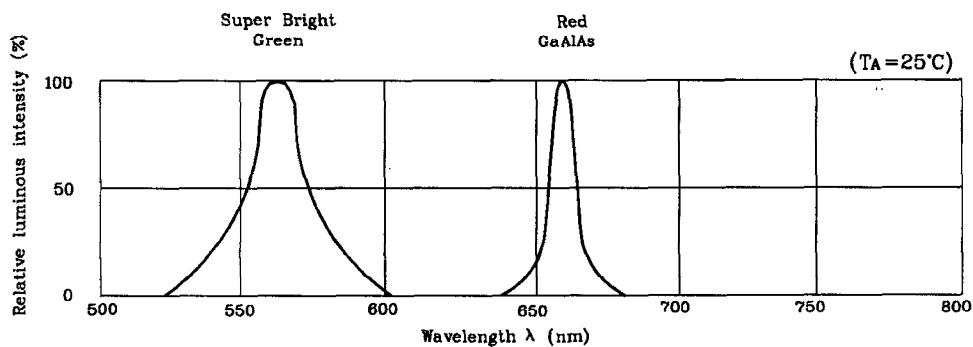
LMx32x Series

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

Parameter	Super Bright Green	Super Bright Red	Units
Power dissipation	105	100	mW
DC Forward Current	25	30	mA
Peak Forward Current [$\tau \leq 10\mu\text{s}$]	150	150	mA
Reverse Voltage	5	5	V
Operating/Storage Temperature	-40°C To +85°C		
Lead Soldering Temperature [4mm below package base]	260°C For 5 Seconds		

❖ Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

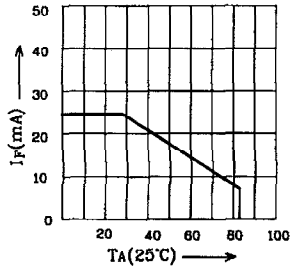
Parameter	Symbol	Dice	Typ.	Max.	Units	Test Conditions
Peak Wavelength	λ_{peak}	Super Bright Green Super Bright Red	565 660		nm	IF=20mA
Spectral Line Halfwidth	$\Delta\lambda_{1/2}$	Super Bright Green Super Bright Red	30 20		nm	IF=20mA
Capacitance	C	Super Bright Green Super Bright Red	45 95		pF	VF=0V; f=1MHz
Forward Voltage	VF	Super Bright Green Super Bright Red	2.2 1.85	2.5 2.5	V	IF=20mA
Reverse Current	IR	All	10		uA	VR = 5V



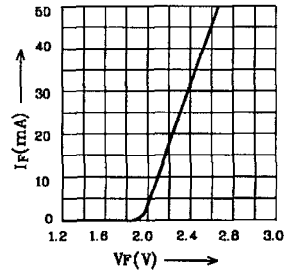
LMG32x/ LMR32x Series

❖ Super Bright Green

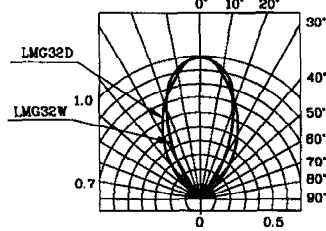
Forward current derating curve



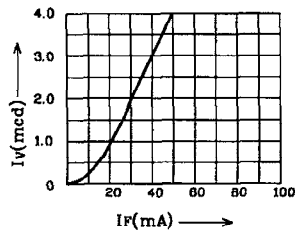
Forward current Vs. Forward voltage



Radiation Characteristics

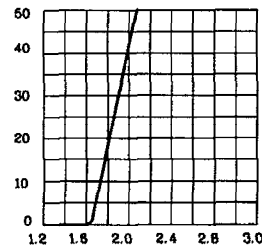
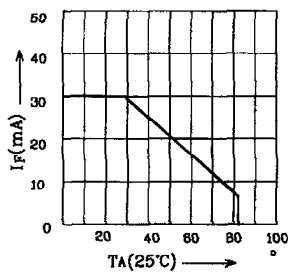


Luminous Intensity Vs. Forward Current

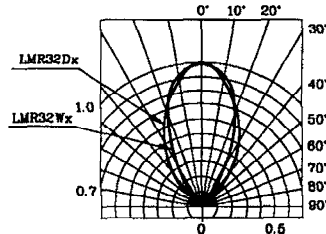


❖ Super Bright Red

Forward current derating curve



Radiation Characteristics



Luminous Intensity Vs. Forward Current

