



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

W53MBD

BLUE

Features

- LOW POWER CONSUMPTION.
- POPULAR T-1 3/4 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.

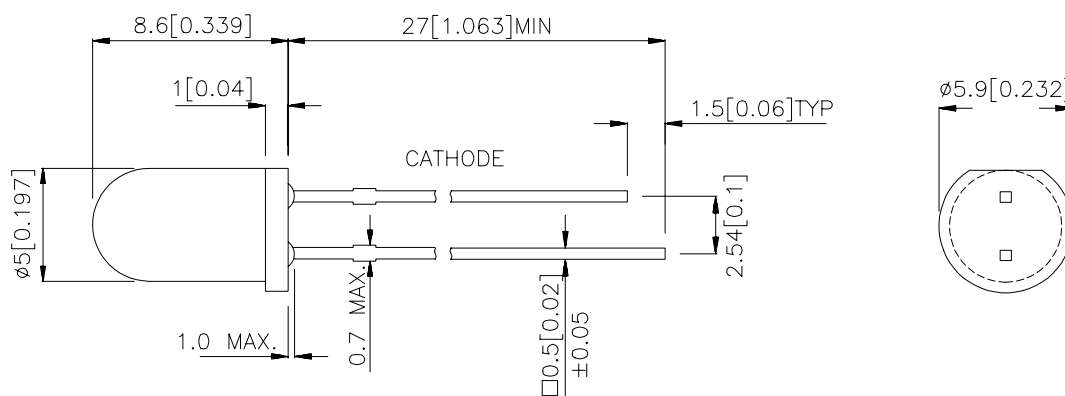
Description

The Blue source color devices are made with GaN on SiC Light Emitting Diode.

Static electricity and surge damage the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25 (0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
W53MBD	BLUE (GaN)	BLUE DIFFUSED	36	60	20°

Note:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at T_A=25°C

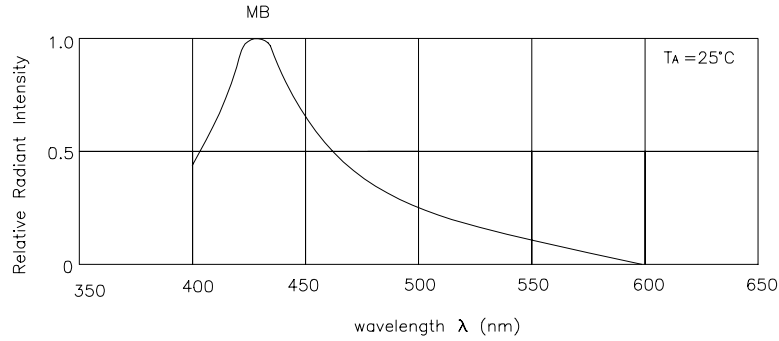
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Blue	430		nm	I _F =20mA
λ_D	Dominate Wavelength	Blue	466		nm	I _F =20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Blue	60		nm	I _F =20mA
C	Capacitance	Blue	100		pF	V _F =0V; f=1 MHz
V _F	Forward Voltage	Blue	3.8	4.5	V	I _F =20mA
I _R	Reverse Current	Blue		10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	Blue	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	150	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.



RELATIVE INTENSITY Vs. WAVELENGTH

Blue

W53MBD

