

5mm LEDs

Order code	Manufacturer code	Description
55-1485	L-7113MBT	5MM HI.INTENSITY TRAN.BLUE LED (RC)

5mm LEDs	Page 1 of 4
The enclosed information is believed to be correct, Information may change 'without notice' due to product improvement. Users should ensure that the product is suitable for their use. E. & O. E.	Revision A 12/12/2006

Features

- LOW POWER CONSUMPTION.
- SOLID STATE BLUE LIGHT SOURCE.
- SUITABLE FOR FULL COLOR LED DISIPLAYS AND INDICATORS DIAGNOSTIC/ANALYTICAL EQUIPMENT.

L-7113MBC BLUE

L-7113MBT BLUE

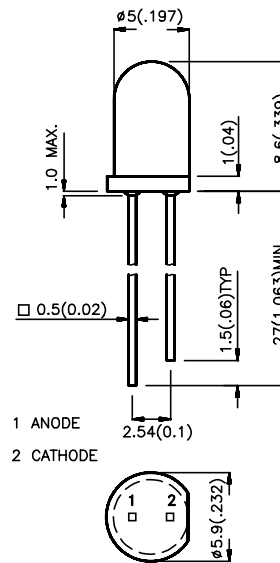
Description

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 $\pm 0.25(0.01)$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

Selection Guide

Part No.	Dice	Case-Color	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	
L-7113MBT	Blue (GaN)	BLUE TRANSPARENT	20	70	16°
L-7113MBC	Blue (GaN)	WATER CLEAR	40	80	16°

Note:

1. $\theta 1/2$ 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

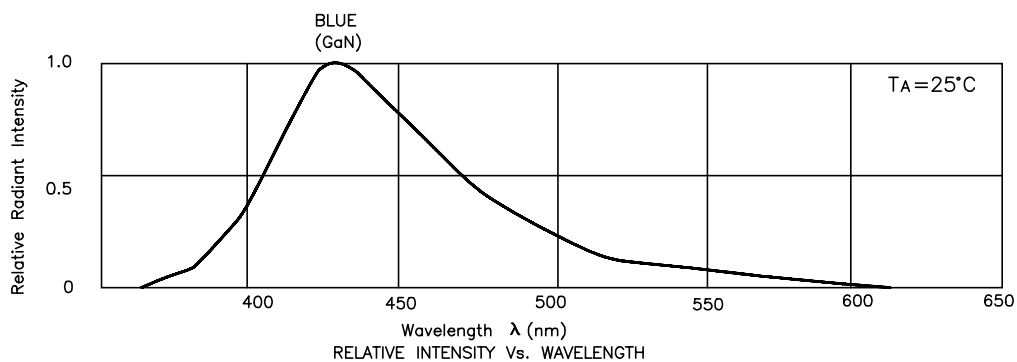
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Blue	430		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Blue	65		nm	IF=20mA
C	Capacitance	Blue	100		pF	VF=0V;f=1MHz
V _F	Forward Voltage	Blue	3.8	4.5	V	IF=20mA
I _R	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

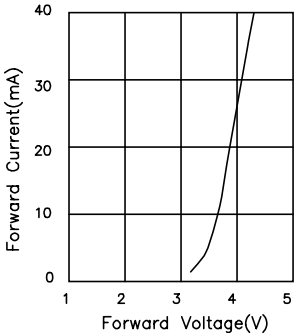
Parameter	Blue	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	200	mA
Reverse Voltage	5	V
Operation/Storage Temperature	-40°C To +85°C	
Lead Soldering Temperature [2]	260°C For 5 Seconds	

Notes:

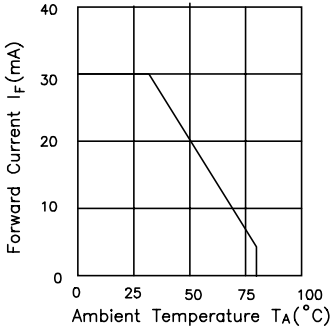
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



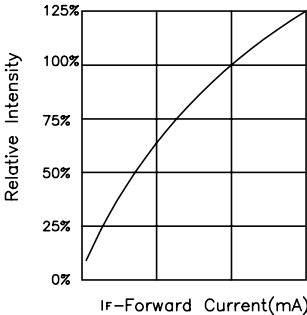
Blue L-53MBC, L-53MBT



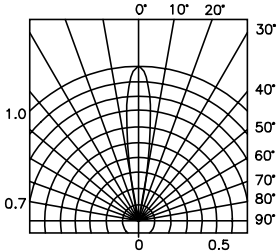
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



RELATIVE INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION