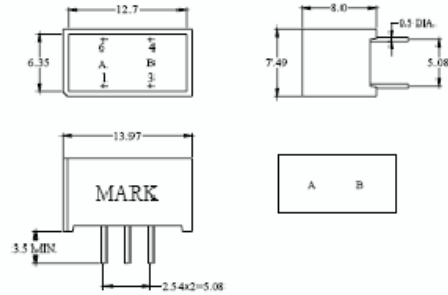




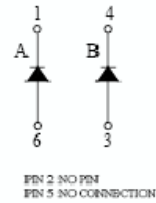
Dimensions:



- Notes:**
 1. THE SLOPE ANGLE OF ANY PIN MAY BE $\pm 5.0^\circ$ MAX.
 2. ALL DIMENSIONS ARE IN mm, TOLERANCE IS ± 0.25 mm UNLESS OTHERWISE NOTED.

Internal Circuit Diagram

LB5941R-11



SELECTOR GUIDE

Part Number	Dice	Lens Color / Type	Pack Size	View Angle $2\theta_{1/2}$
MTLB4150-HR-A	Orange	Water Clear	0.50 in. light bar	0°

ELECTRICAL / OPTICAL CHARACTERISTICS AT $T_A=25^\circ\text{C}$

Parameter	Symbol	Device	Min.	Typ.	Max.	Units	Test Conditions
Forward Voltage	V_F	Orange	-	2.1	2.6	V	$I_F=20\text{mA}$
Reverse Current	I_R	Orange	-	-	100	μA	$V_R=5\text{V}$
Luminous Intensity	I_V	Orange	2.9	4.8	-	mcd	$I_F=10\text{mA}$
Peak Wavelength	λ_{peak}	Orange	-	635	-	nm	$I_F=20\text{mA}$
Dominant Wavelength	λ_D	Orange	-	626	-	nm	$I_F=20\text{mA}$
Spectral Line Half-Width	$\Delta\lambda_{1/2}$	Orange	-	35	-	nm	$I_F=20\text{mA}$

ABSOLUTE MAXIMUM RATINGS AT $T_A=25^\circ\text{C}$

Parameter	Rating	Units
Forward Current (I_F)	30	mA
Power Dissipation (P_D)	156	mW
Reverse Voltage (V_R)	5	V
Operating Temperature (T_{OPR})	-25 ~ +85	$^\circ\text{C}$
Storage Temperature (T_{STG})	-40 ~ +100	$^\circ\text{C}$
Lead Solder Temperature (T_{SOL})	260 $^\circ\text{C}$ @ for 5 sec. max	

- All Dimensions Are In Millimeters (inches).
- Tolerance Is $\pm 0.25(0.01)$ " Unless Otherwise Noted.
- Specifications Are Subject To Change Without Notice.

**Typical Electrical/Optical Characteristic Curves
(25°C Ambient Temperature Unless Otherwise Noted)**

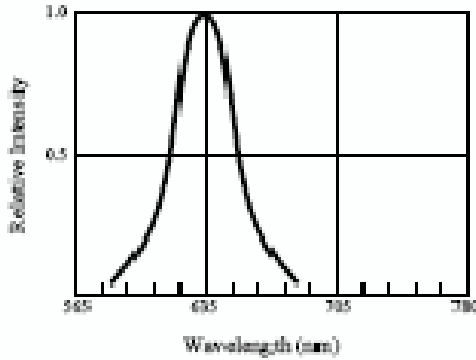


Fig.1 RELATIVE INTENSITY VS. WAVELENGTH

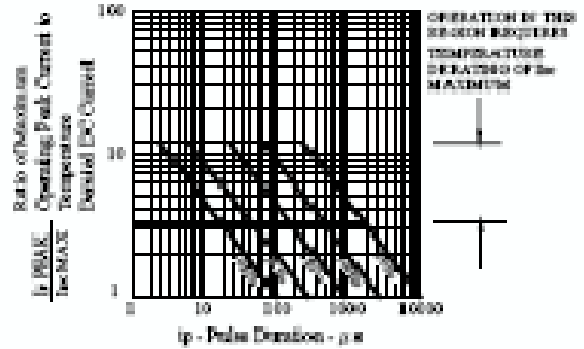


Fig.2 MAXIMUM TOLERABLE PEAK CURRENT VS. PULSE DURATION

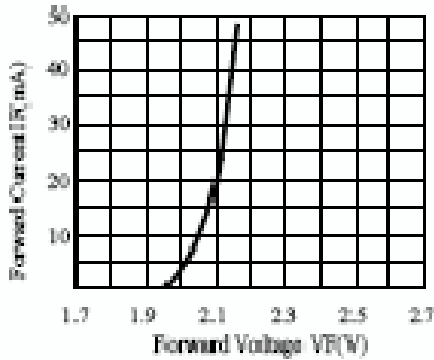


Fig.3 FORWARD CURRENT VS. FORWARD VOLTAGE PER CHIP

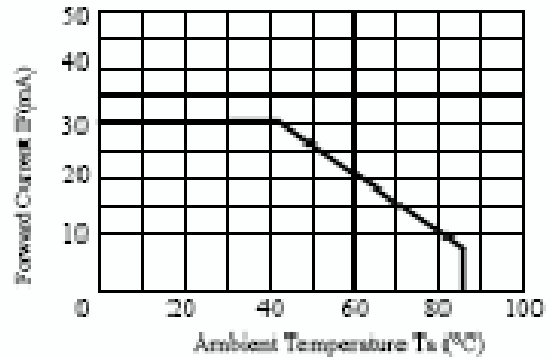


Fig.4 FORWARD CURRENT VS. DERATING CURVE

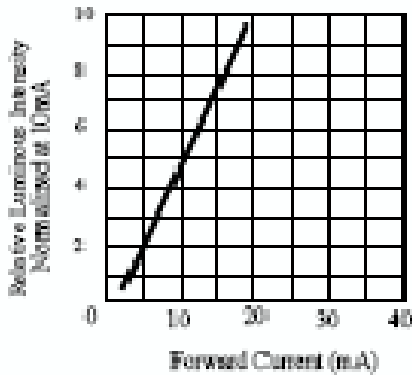


Fig.5 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

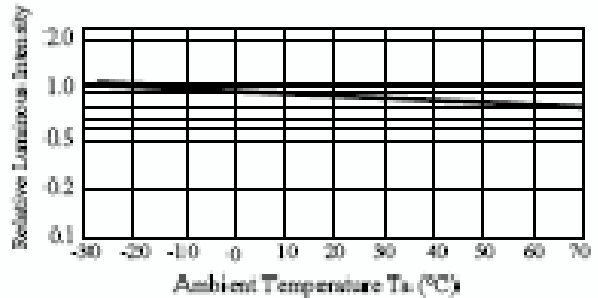


Fig.6 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

