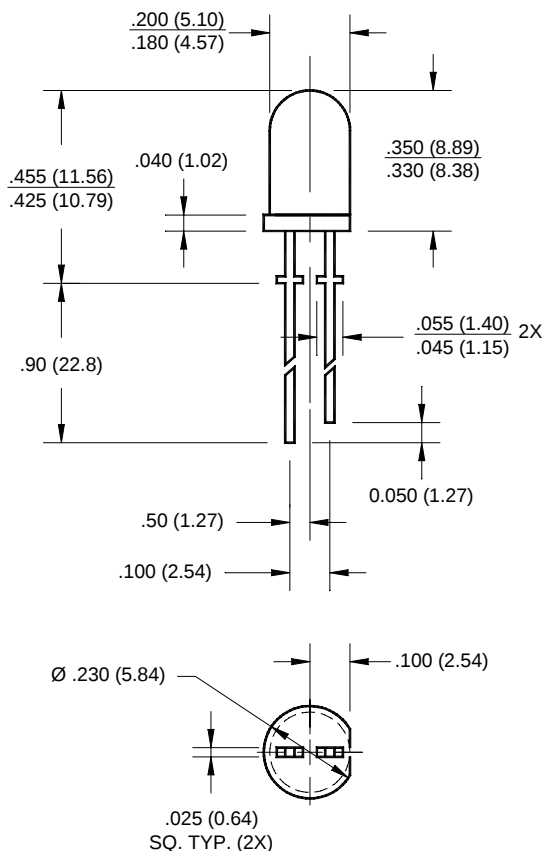


INTEGRATED T-1 3/4 RESISTOR LAMPS 5 VOLT AND 12 VOLT SERIES

RED MR3050/MR3051 TINTED
HIGH EFFICIENCY RED MR3750/MR3751 TINTED
YELLOW MR3350/MR3351 TINTED
GREEN MR3450/MR3451 TINTED

PACKAGE DIMENSIONS

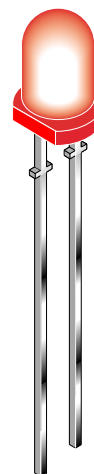


FEATURES

- Integral current limiting resistor (No external resistor required)
- Operates with 5 volt & 12 volt supplies
- Wide viewing angle
- Solid state reliability

DESCRIPTION

These T-1 3/4 LED lamps contain an integral resistor. Operation at 5 volts (MR3X50) or 12 volts (MR3X51) is possible without the use of an external current limiting resistor. The epoxy lens is tinted and diffused to provide color identification and a wide viewing angle.



NOTES:

ALL DIMENSIONS ARE IN INCHES (mm).

ABSOLUTE MAXIMUM RATING (T_A = 25°C)

Parameter	RED/HER/YELLOW 5 VOLT LAMPS	RED/HER/YELLOW 12 VOLT LAMPS	GREEN 5 VOLT LAMPS	GREEN 12 VOLT LAMPS	UNITS
DC Forward Current	7.5	15	7.5	15	mA
Lead Soldering Time at 260° C	5	5	5	5	sec
Reverse Breakdown Voltage	5.0	5.0	5.0	5.0	I _R = 100μA
Operating Temperature	-40 to +100	-40 to +100	-20 to +100	-20 to +100	°C
Storage Temperature	-55 to +100	-55 to +100	-50 to +100	-50 to +100	°C

ELECTRICAL / OPTICAL CHARACTERISTICS (T_A = 25°C)

Parameter	RED MR3050/1	HER MR3750/1	YELLOW MR3350/1	GREEN MR3450/1	Condition
Luminous Intensity (mcd)					V _F = 5V / V _F = 12V
Minimum	1.0	1.5	1.5	1.5	
Typical	2.0	4.0	4.0	4.0	
Forward Current (mA)					V _F = 5V / V _F = 12V
Typical	13/13	10/13	10/13	12/13	
Maximum	20/20	15/20	15/20	15/20	
Peak Wavelength (nm)	660	635	585	565	V _F = 5V / V _F = 12V
Spectral Line Half Width (nm)	24	40	36	28	V _F = 5V / V _F = 12V
Viewing Angle (°)	60	60	60	60	V _F = 5V / V _F = 12V

TYPICAL PERFORMANCE CURVES ($T_A = 25^\circ\text{C}$)

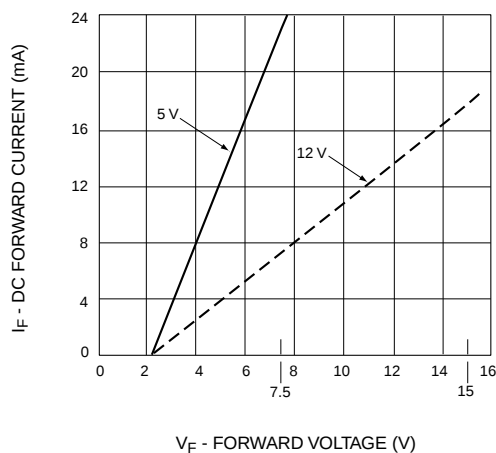


Fig. 1 I - V Curve

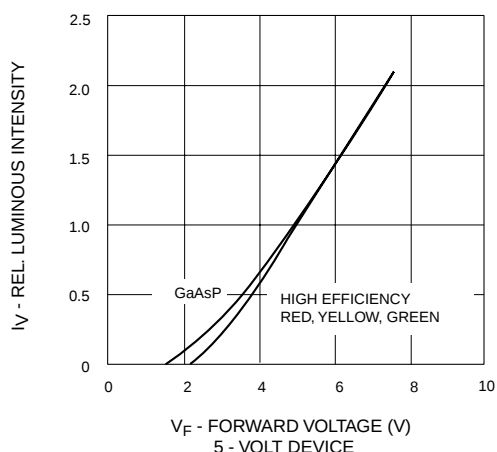


Fig. 2A Luminous Intensity vs Forward Voltage

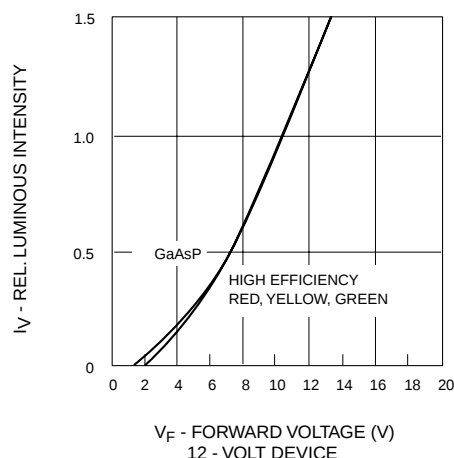


Fig. 2B Luminous Intensity vs Forward Voltage

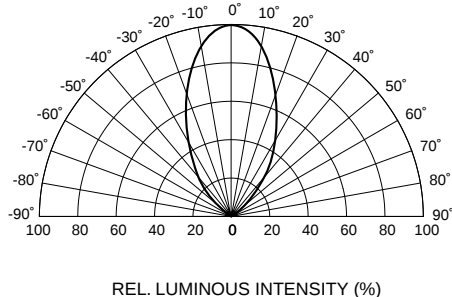


Fig. 3 Radiation Diagram

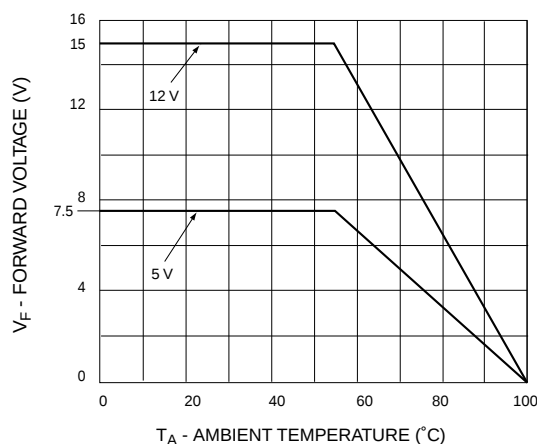


Fig. 4 Maximum Allowed Forward Voltage vs Ambient Temperature

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