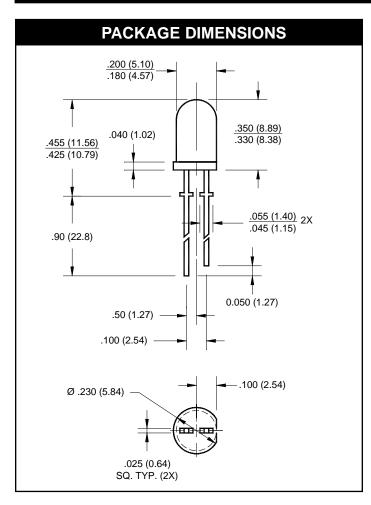


INTEGRATED T-1 3/4 RESISTOR LAMPS 5 VOLT AND 12 VOLT SERIES

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



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).



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

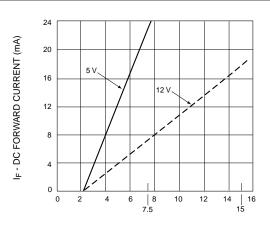
ABSOLUTE MAXIMUM RATING (TA =25°C)								
	RED/HER/YELLOW	RED/HER/YELLOW	GREEN	GREEN				
Parameter	5 VOLT LAMPS	12 VOLT LAMPS	5 VOLT LAMPS	12 VOLT LAMPS	UNITS			
DC Forward Current	7.5	15	7.5	15	mA			
Lead Soldering Time at 260° C	5	5	5	5	sec			
Reverse Breakdown Voltage	5.0	5.0	5.0	5.0	I _R = 100μA			
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 (TA =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	$V_F = 5V / V_F = 12V$		



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

TYPICAL PERFORMANCE CURVES (TA =25°C)



V_F - FORWARD VOLTAGE (V)

Fig. 1 I - V Curve

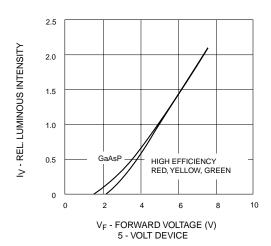


Fig. 2A Luminous Intensity vs Forward Voltage

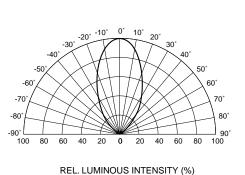


Fig. 3 Radiation Diagram

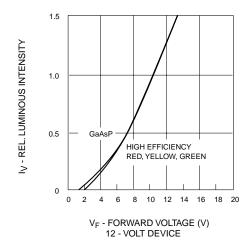


Fig. 2B Luminous Intensity vs Forward Voltage

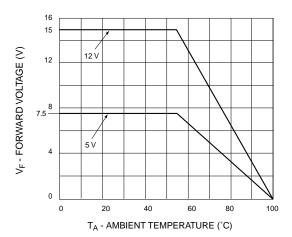


Fig. 4 Maximum Allowed Forward Voltage
vs Ambient Temperature



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

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