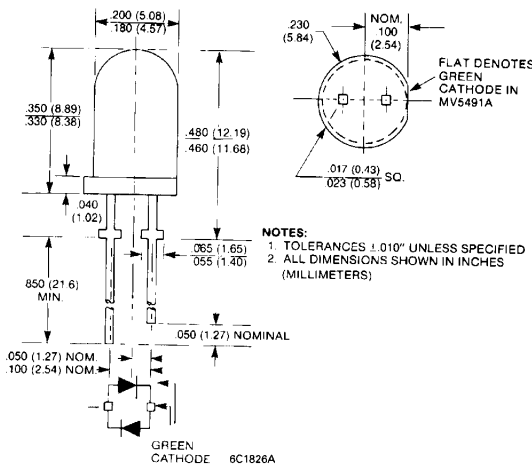




BICOLOR AND BIPOLAR T-1^{3/4} SOLID STATE LAMPS

HIGH EFFICIENCY GREEN/AlGaAs RED **MV5491A** HIGH EFFICIENCY RED/AlGaAs RED **MV5094A**

PACKAGE DIMENSIONS



DESCRIPTION

The Green/Red MV5491A and Red/Red MV5094A are superior drop-in replacements for Quality Technologies' bicolor Green/Red MV5491 or MV9475 and for bipolar Red/Red MV5094 or MV9775. The MV5491A is a White Diffused, very wide viewing angle, dual chip, 4-state lamp utilizing Deep Red AlGaAs and High Efficiency Green. AC-driven, the LED lamp appears Orange. The MV5094A is a Red Diffused, very wide viewing angle bipolar Red (AC) lamp featuring Red AlGaAs and High Efficiency Red chips.

FEATURES

- Excellent uniformity and visual appeal
- Very wide viewing angle for perfect direct view
- Increased reliability
- Radically improved die-off-center characteristics
- Same current for both colors for minimum component count
- Improved solder heat durability
- 4-state; Green, Red, Orange, OFF (MV5491A)
- 1" leads
- May be panel mounted—MP52 is separate order item

ELECTRO-OPTICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)						
PARAMETER		SYMBOL	MV5491A	MV5094A	UNITS	TEST CONDITIONS
Luminous Intensity	min.	I_v	2.0	2.0	mcd	$I_f = 20\text{ mA}$
	typ.		6.0	6.0	mcd	$I_f = 20\text{ mA}$
Forward voltage	max.	V_f	3.0	3.0	V	$I_f = 20\text{ mA}$
	typ.		2.3	2.3	V	$I_f = 20\text{ mA}$
Dominant wavelength	typ.	λ_d	568/650	630/650	nm	$I_f = 20\text{ mA}$
Total viewing angle between half luminous intensity points	typ.	$2\theta_{50}$	100	75	degrees	$I_f = 20\text{ mA}$

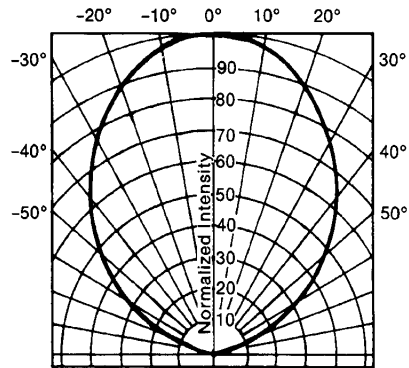
ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ Unless Otherwise Specified)			
PARAMETER	RATING	UNITS	NOTES
Power dissipation	135	mW	1
Peak current	90	mA	
Average current	30	mA	2
Lead soldering time	5	seconds	
Lead soldering temperature	260°C		
Storage and operating temperatures	-55°C to +100°C		3

NOTES

1. Derate power linearly from 25°C at 1.8 mW/°C.
2. Derate power linearly from 50°C at 0.5 mA/°C.
3. To a point minimum 1/16 inch (1.6 mm) from the bottom of the lamp.

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES

($T_A=25^\circ\text{C}$ Unless Otherwise Specified)



6C1827

Fig. 1. Spatial Distribution