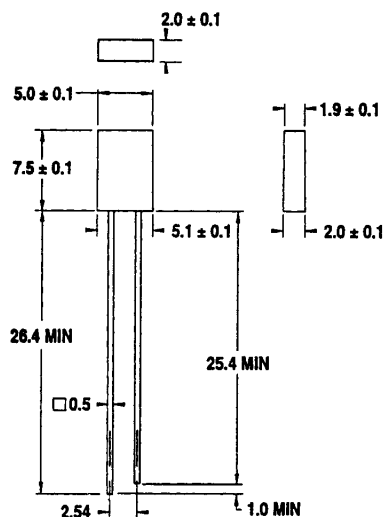




RECTANGULAR SOLID STATE LAMPS

YELLOW MV53123
HIGH EFFICIENCY GREEN MV54123
HIGH EFFICIENCY RED MV57123

PACKAGE DIMENSIONS



C1667A

NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MM)
2. TOLERANCES ARE $\pm 0.10^\circ$ INCHES UNLESS SPECIFIED.
3. AN EPOXY MENISCUS MAY EXTEND ABOUT .40" (1MM) DOWN THE LEADS. THE BASE OF THE PACKAGE IS NOT FLAT.

DESCRIPTION

These rectangular LED lamps provide a lighted surface area 2×5 mm. The High Efficiency Red and Yellow solid state lamps contain a gallium arsenide phosphide on gallium phosphide light emitting diode. The High Efficiency Green Lamps utilize an improved gallium phosphide light emitting diode.

FEATURES

- 2×5 mm lighted area
- High brightness—typically 4 mcd at 20 mA
- Solid state reliability
- Compact, rugged, lightweight

APPLICATIONS

- Legend backlighting
- Illuminated pushbutton
- Panel indicator
- Bargraph meter

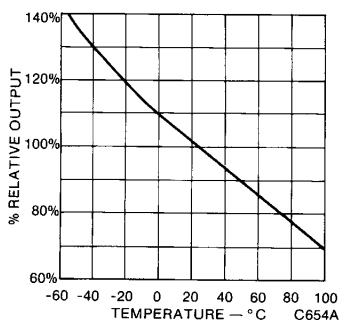
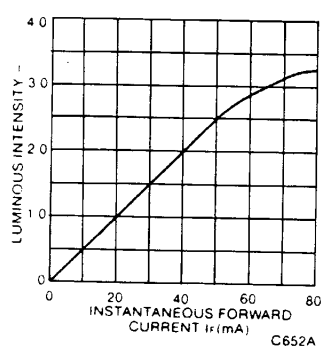
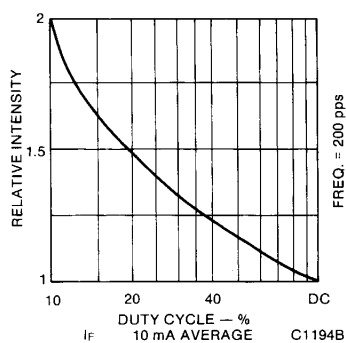
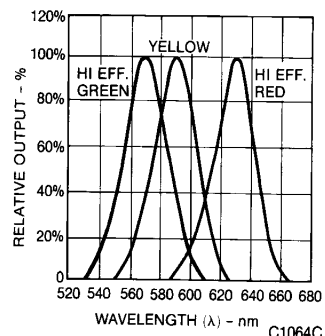
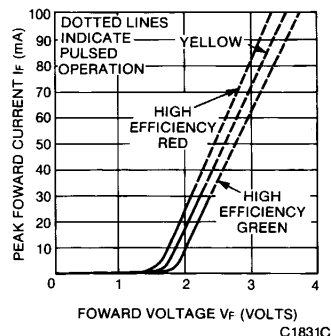


RECTANGULAR SOLID STATE LAMPS

ELECTRO-OPTICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ Unless Otherwise Specified)					
PARAMETER	TEST COND.	UNITS	MV53123	MV54123	MV57123
Forward voltage (V_F)					
typ.	$I_F=20\text{ mA}$	V	2.1	2.2	2.0
max.	$I_F=20\text{ mA}$	V	3.0	3.0	3.0
Luminous Intensity					
min.	$I_F=20\text{ mA}$	mcd	1.0	1.0	1.0
typ.	$I_F=20\text{ mA}$	mcd	4.0	4.0	4.0
Peak wavelength					
half width	$I_F=20\text{ mA}$	mcd	585	562	635
		nm	45	30	45
Capacitance					
typ.	$V=0, f=1\text{ MHz}$	pF	45	20	45
Reverse voltage (V_R)					
min.	$I_R=100\text{ }\mu\text{A}$	V	5.0	5.0	5.0
Viewing angle (total)		degrees	100	100	100

ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ Unless Otherwise Specified)		
	MV53123	MV54123 MV57123
Power dissipation	85 mW	120 mW
Derate linearly from 50°C	1.6 mW/ $^{\circ}\text{C}$	1.6 mW/ $^{\circ}\text{C}$
Storage and operating temperatures	-55°C to $+100^{\circ}\text{C}$	-55°C to $+100^{\circ}\text{C}$
Peak forward current (1 μsec pulse width 300 pps)	60 mA	90 mA
Forward current	20 mA	30 mA
Lead soldering time at 260°C (See Note 1)	5 sec.	5 sec.
Reverse voltage	5.0 V	5.0 V

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES
(25°C Free Air Temperature)



NOTES

1. The leads of the device immersed in molten solder, heated to a temperature of 260°C, to a point 1/16 inch (1.6 mm) from the body of the device per MIL-S-750, with dwell time of 5 seconds.