

MVL-381G
MVL-381Y
MVL-381HR

Description

The MVL-381xx series package are T-1 (φ3mm) standard color diffused plastic lens package. The Hi-EFF red (HR) and yellow LED chips are made with Gallium Arsenide Phosphide on Gallium Phosphide diode. The green LED chip is made with Gallium Phosphide on Gallium Phosphide diode.

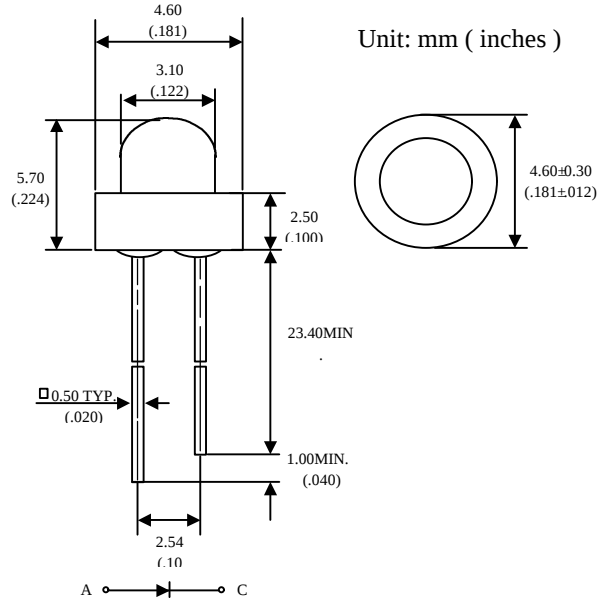
Applications

- Popular T-1 (φ3mm) diameter package
- Selected minimum intensities
- General purpose leads
- Reliable and rugged

Absolute Maximum Ratings

Parameter	Symbol	Maximum Rating			Unit
		GREEN	YELLOW	HR	
Power Dissipation	Pad	100	60	100	mW
Peak Forward Current (1/10 Duty Cycle 0.1ms pulse width)	Ipf	120	80	120	A
Continuous Forward Current	Iaf	30	20	30	mA/°C
Derating Linear From 25°C		0.4	0.25	0.4	mA
Reverse Voltage	V _R	5	5	5	V
Operating Temperature Range	Topr	-55°C to + 100°C			
Storage Temperature Range	Tstg	-55°C to + 100°C			
Lead Soldering Temperature (1.6mm from body) for 3 seconds at 260°C					

Package Dimensions



Optical -Electrical Characteristics

Part No. : MVL-381G

@T_A=25°C

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	I _F =10mA	I _V	4.0	12	-	mcd
Forward Voltage	I _F =20mA	V _F	-	2.1	2.8	V
Reverse Current	V _R =5V	I _R	-	-	100	μA
Wavelength	I _F =20mA	λ _p	-	565	-	nm
Spectral Line Half Width	I _F =20mA	Δλ	-	30	-	nm
Viewing Angle	I _F =20mA	2θ _{1/2}	-	30	-	deg

Part No. : MVL-381Y

@T_A=25°C

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	I _F =10mA	I _V	4.0	12	-	mcd
Forward Voltage	I _F =20mA	V _F	-	2.1	2.8	V
Reverse Current	V _R =5V	I _R	-	-	100	μA
Wavelength	I _F =20mA	λ _p	-	585	-	nm
Spectral Line Half Width	I _F =20mA	Δλ	-	35	-	nm
Viewing Angle	I _F =20mA	2θ _{1/2}	-	30	-	deg

Part No. : MVL-381HR

@T_A=25°C

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	I _F =10mA	I _V	3.0	7.0	-	mcd
Forward Voltage	I _F =20mA	V _F	-	2.0	2.8	V
Reverse Current	V _R =5V	I _R	-	-	100	μA
Wavelength	I _F =20mA	λ _p	-	640	-	nm
Spectral Line Half Width	I _F =20mA	Δλ	-	40	-	nm
Viewing Angle	I _F =20mA	2θ _{1/2}	-	30	-	deg

Typical Optical-Electrical Characteristic Curves

