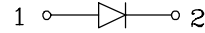
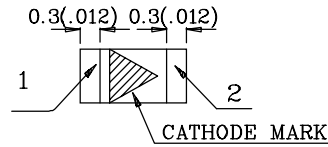
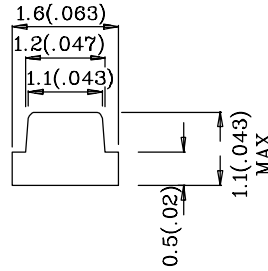
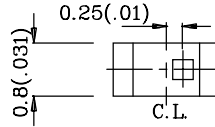


1.6x0.8mm SMD CHIP LED LAMP



SUN LED

ZMD53W



Notes:

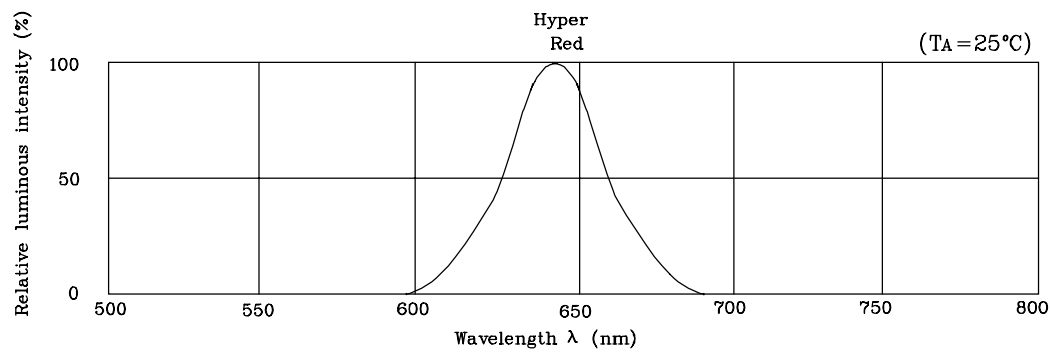
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ unless otherwise noted.

Absolute maximum ratings ($T_A=25^\circ\text{C}$)		MD (InGaAlP)	Unit
Reverse voltage	V_R	5	V
Forward current	I_F	50	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i_{FS}	150	mA
Power dissipation	P_T	170	mW
Operation temperature	T_A	-40 ~ +85	$^\circ\text{C}$
Storage temperature	T_{stg}		

Operating Characteristics ($T_A=25^\circ\text{C}$)		MD (InGaAlP)	Unit
Forward voltage (typ.) ($I_F=20\text{mA}$)	V_F	2.0	V
Forward voltage (max.) ($I_F=20\text{mA}$)	V_F	2.2	V
Reverse current ($V_R=5\text{V}$)	I_R	10	μA
Wavelength at peak emission ($I_F=20\text{mA}$)	λ_{peak}	640	nm
Spectral Line half-width ($I_F=20\text{mA}$)	$\Delta\lambda$	25	nm
Capacitance ($V_F=0$, $f=1\text{MHz}$)	C	35	pF

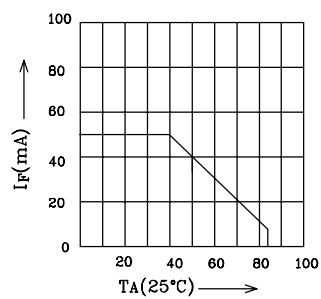
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($I_F=20\text{mA}$) mcd		Wavelength nm	Viewing Angle
				min.	typ.		
ZMD53W	red	InGaAlP	water clear	70	150	640	120°

ZMD53W

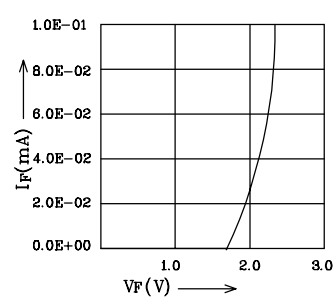


❖MD

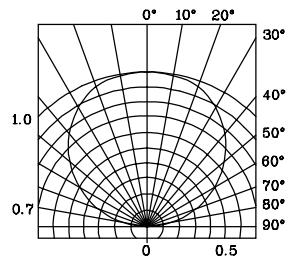
Forward current derating curve



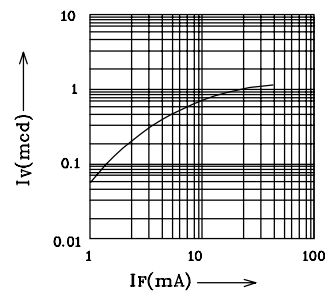
Forward current Vs. Forward voltage



Radiation Characteristics



Luminous Intensity Vs. Forward Current

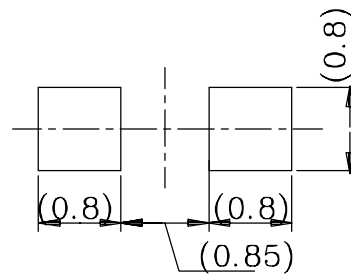


ZMD53W

❖ SMT Reflow Soldering Instructions



❖ Recommended Soldering Pattern (Units : mm)



ZMD53W

❖ Tape Specification (Units : mm)

