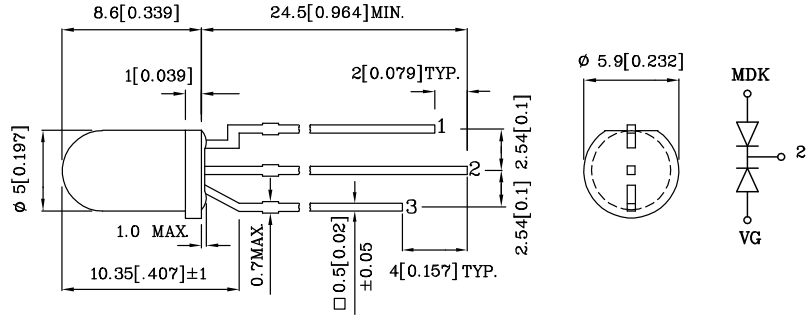


Features

- UNIFORM LIGHT OUTPUT.
- LOW POWER CONSUMPTION.
- 3 LEADS WITH ONE COMMON LEAD.
- I.C. COMPATIBLE.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.



- 1 ANODE RED
- 2 COMMON CATHODE
- 3 ANODE GREEN

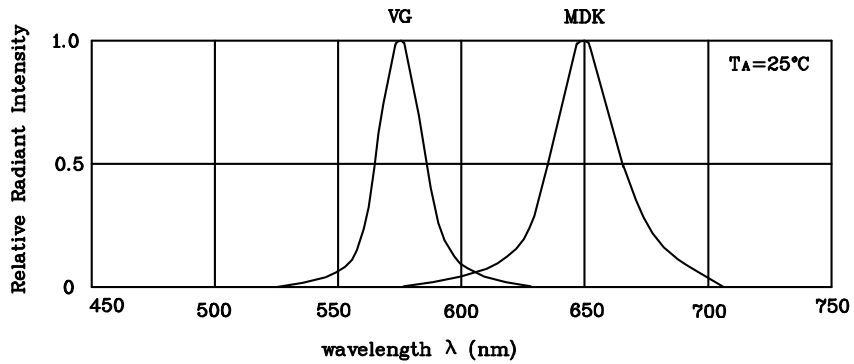
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ " unless otherwise noted.

Absolute maximum ratings ($T_A=25^\circ\text{C}$)		MDK (InGaA IP)	VG (InGaAlP)	Unit
Reverse voltage	V_R	5	5	V
Forward current	I_F	30	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i_{FS}	185	150	mA
Power dissipation	P_T	170	105	mW
Operating temperature	T_A	-40 ~ +85		°C
Storage temperature	T_{stg}	-40 ~ +85		
Lead solder temperature [2mm below package base]	260°C For 3 Seconds			
Lead solder temperature [5mm below package base]	260°C For 5 Seconds			

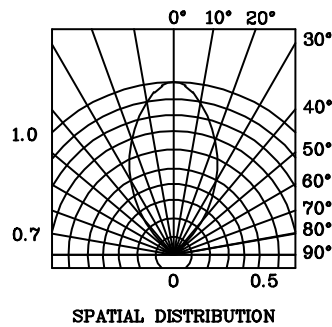
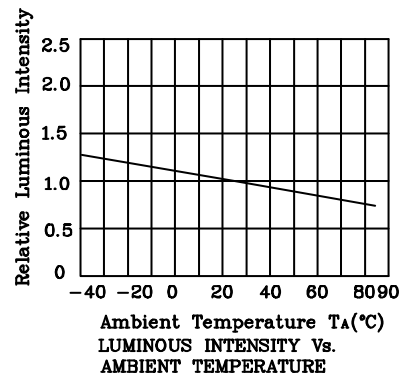
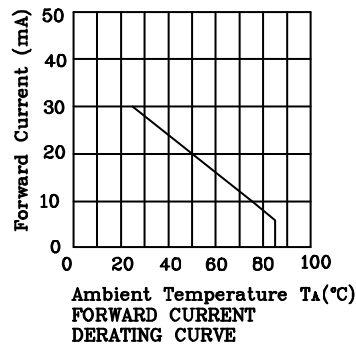
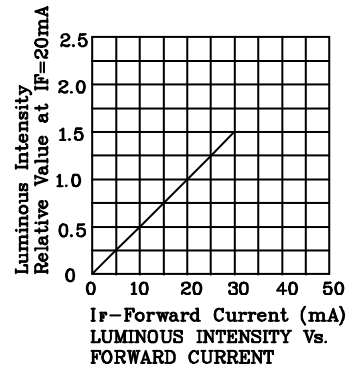
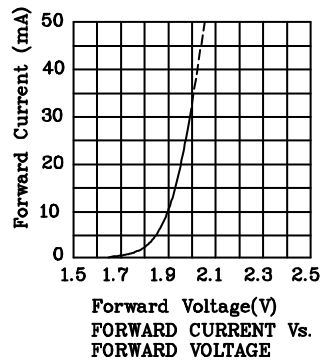
Operating Characteristics ($T_A=25^\circ\text{C}$)		MDK (InGaAlP)	VG (InGaA IP)	Unit
Forward voltage (typ.) ($I_F=20\text{mA}$)	V_F	1.95	2.1	V
Forward voltage (max.) ($I_F=20\text{mA}$)	V_F	2.5	2.5	V
Reverse current ($V_R=5\text{V}$)	I_R	10	10	μA
Wavelength at peak emission ($I_F=20\text{mA}$)	λ_{peak}	650	574	nm
Wavelength of Dominant emission ($I_F=20\text{mA}$)	λ_D	635	570	nm
Spectral Line half-width ($I_F=20\text{mA}$)	$\Delta\lambda$	28	20	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	35	15	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($I_F=20\text{mA}$) mcd		Wavelength nm λ_P	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XLMDKVG59M	Red	InGaAlP	White Diffused	280	697	650	60°
	Green	InGaAlP		70	198	574	

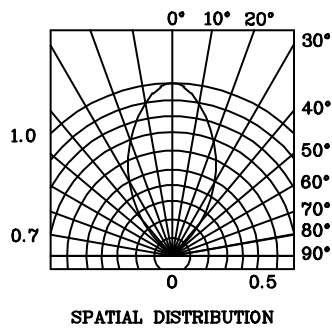
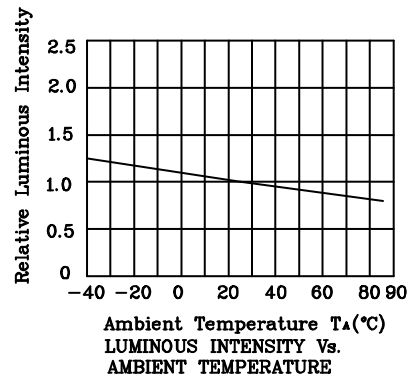
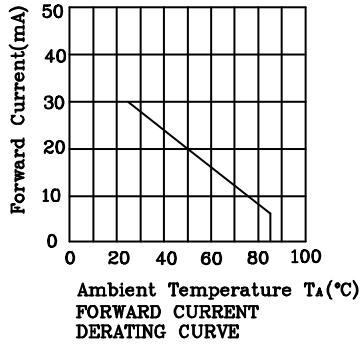
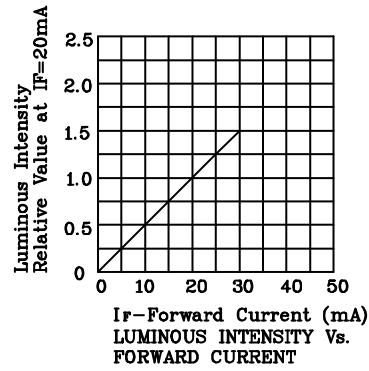
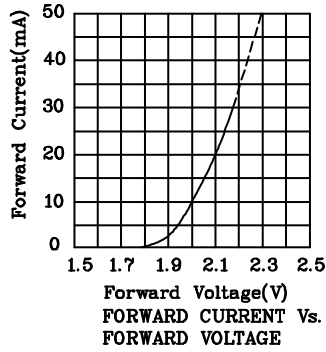


RELATIVE INTENSITY Vs. WAVELENGTH

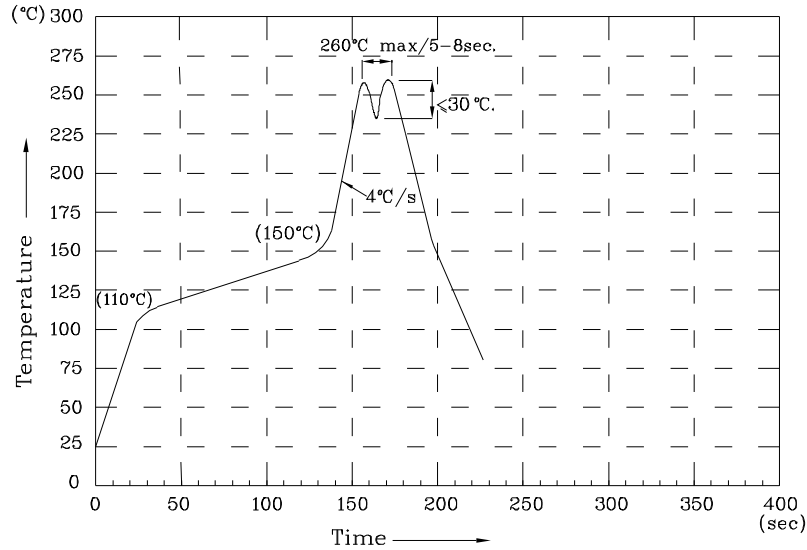
❖ MDK



❖ VG



Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

- 1.Recommend the wave temperature 245°C~260°C.The maximum soldering temperature should be less than 260°C.
- 2.Do not apply stress on epoxy resins when temperature is over 85 degree°C.
- 3.The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
- 4.No more than once.

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.