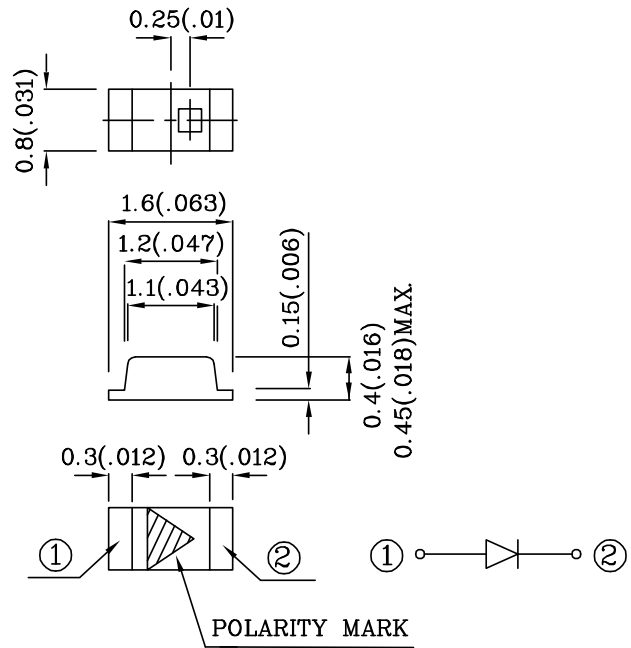


Features

- 1.6mmx0.8mm SMT LED, 0.45mm MAX. THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- ROHS COMPLIANT.



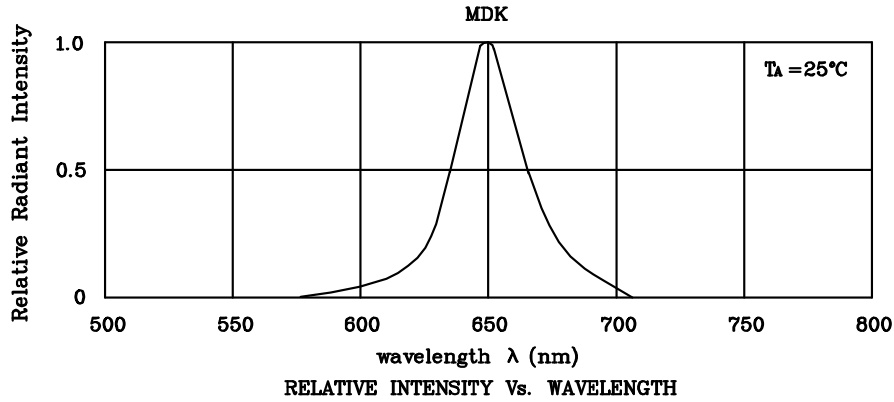
Notes:

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

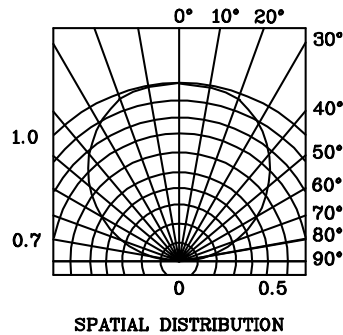
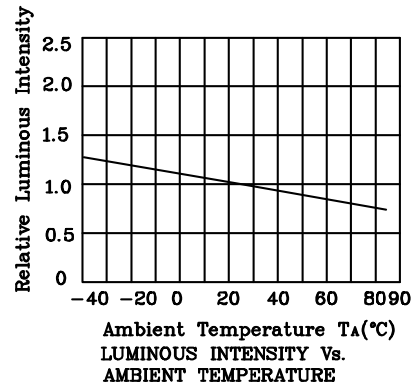
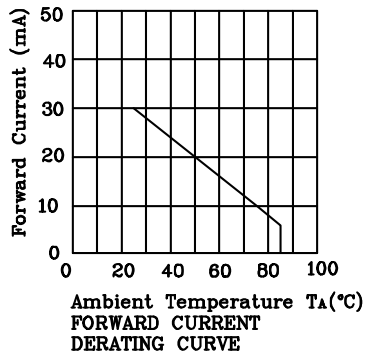
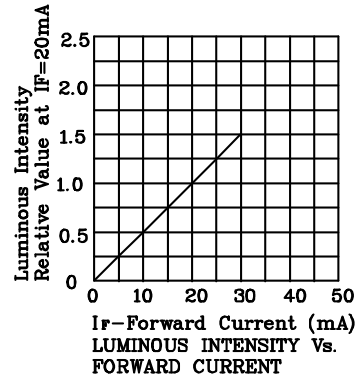
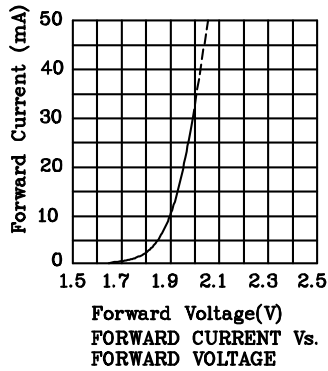
Absolute maximum ratings ($T_A=25^\circ\text{C}$)		MDK (InGaAlP)	Unit
Reverse voltage	V_R	5	V
Forward current	I_F	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i_{FS}	185	mA
Power dissipation	P_T	170	mW
Operating temperature	T_A	-40 ~ +85	°C
Storage temperature	T_{stg}	-40 ~ +85	

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

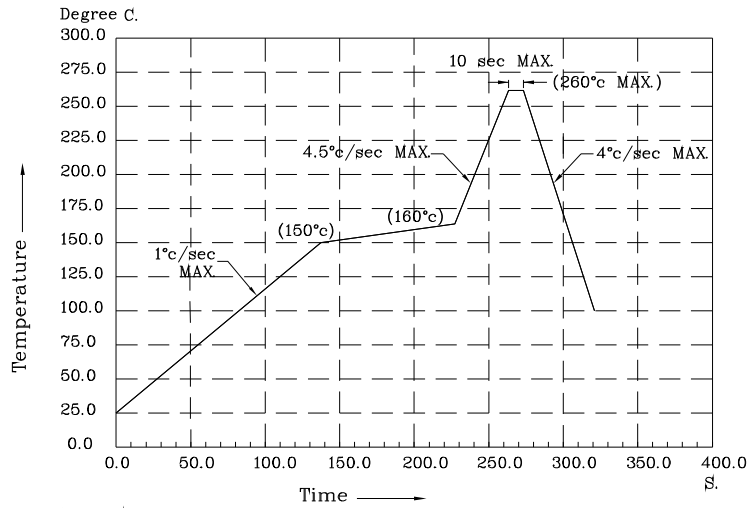
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($I_F=20\text{mA}$) med		Wavelength nm λ_P	Viewing Angle 2θ 1/2
				min.	typ.		
XZMDK53W-3	Red	InGaAlP	Water Clear	50	149	650	120°
Published Date : SEP 23,2004 Drawing No :XDSA4070 V2 Checked : B.L.LIU P.1/3							



❖ MDK



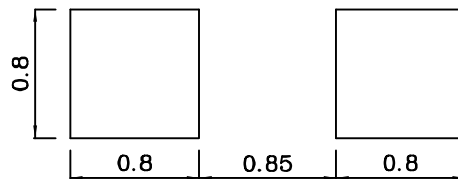
REFLOW SOLDERING INSTRUCTIONS
FOR LEAD-FREE SMT PROCESS



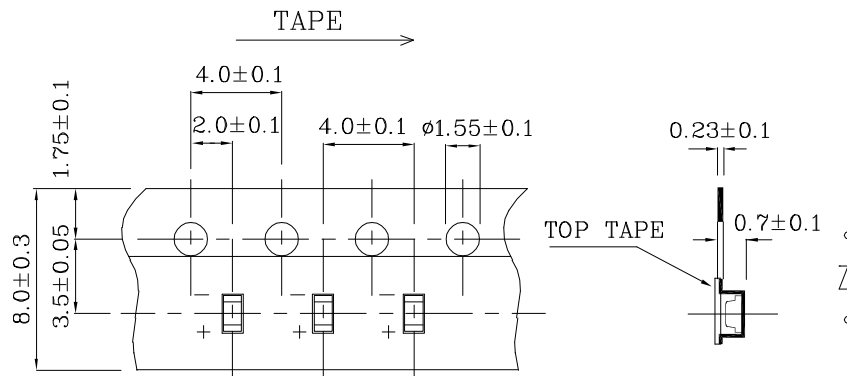
NOTES:

1. We recommend the reflow temperature 245°C~260°C. The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.

❖ Recommended Soldering Pattern (Units: mm ; Tolerance: ± 0.1)



❖ Tape Specification (Units : mm)



1.6x0.8mm SMD CHIP LED LAMP

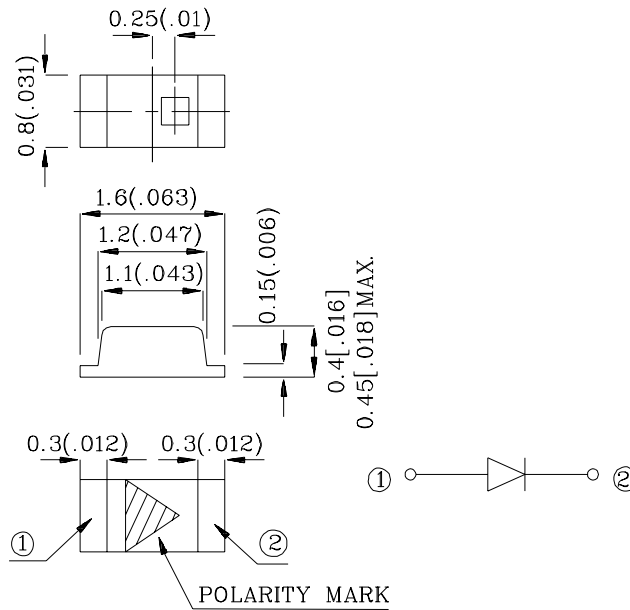


SUN LED

Email : sales@us.sunled.com

Web Site : www.sunled.com

XZMO53W-3



Notes:

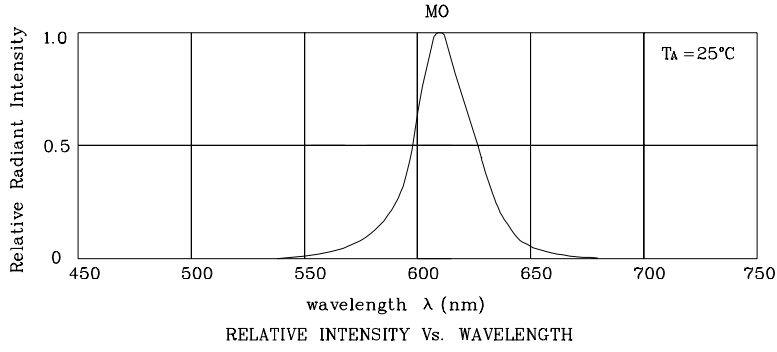
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.

Absolute maximum ratings ($T_A=25^{\circ}\text{C}$)		MO (InGaAlP)	Unit
Reverse voltage	V_R	5	V
Forward current	I_F	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i_{FS}	195	mA
Power dissipation	P_T	75	mW
Operating temperature	T_A	-40 ~ +85	$^{\circ}\text{C}$
Storage temperature	T_{stg}		

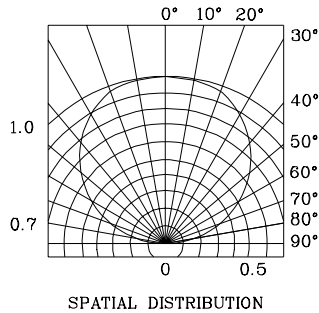
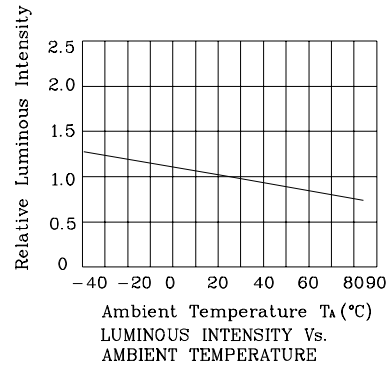
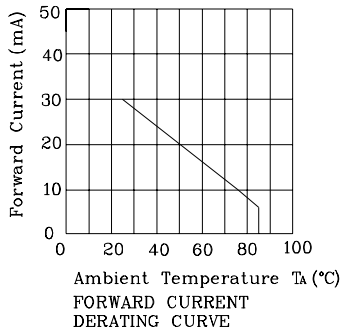
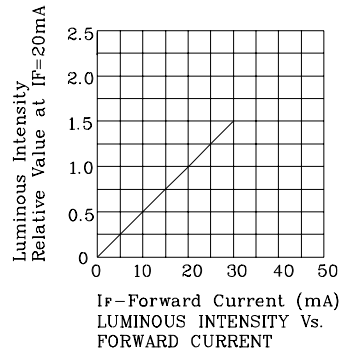
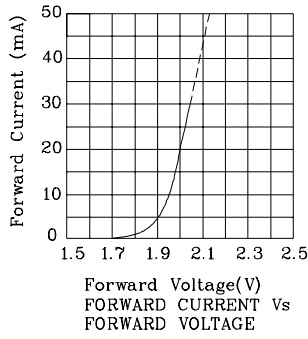
Operating Characteristics ($T_A=25^{\circ}\text{C}$)		MO (InGaAlP)	Unit
Forward voltage (typ.) ($I_F=20\text{mA}$)	V_F	2.0	V
Forward voltage (max.) ($I_F=20\text{mA}$)	V_F	2.5	V
Reverse current ($V_R=5\text{V}$)	I_R	10	μA
Wavelength at peak emission ($I_F=20\text{mA}$)	λ_{peak}	610	nm
Wavelength at Dominate emission ($I_F=20\text{mA}$)	λ_D	601	nm
Spectral Line half-width ($I_F=20\text{mA}$)	$\Delta\lambda$	29	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	30	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.		
XZMO53W-3	Orange	InGaAlP	Water Clear	70	199	610	120 $^{\circ}$

XZMO53W-3

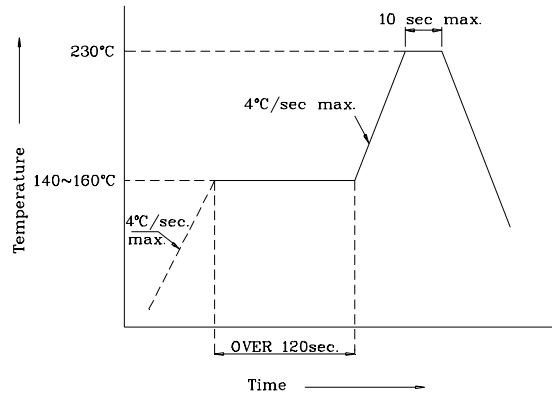


◆MO

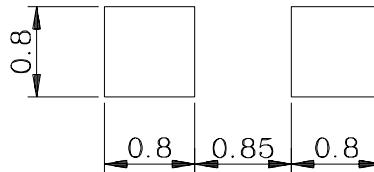


XZMO53W-3

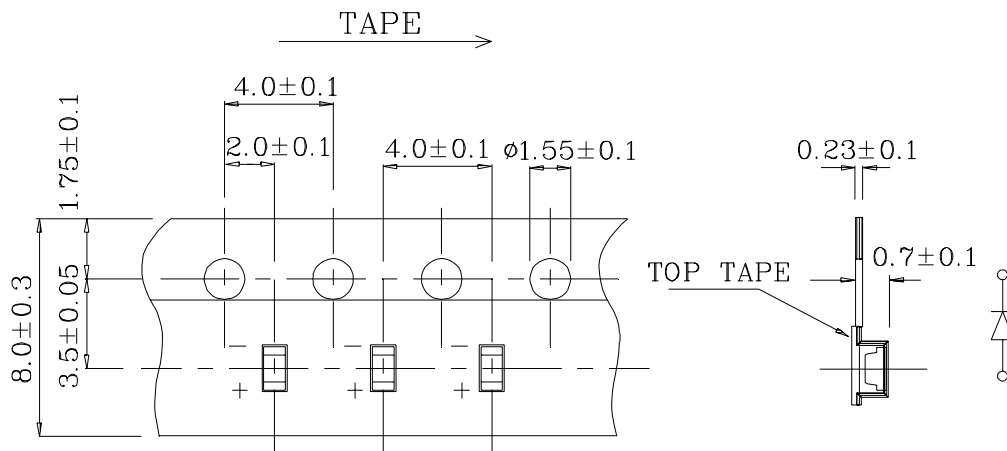
❖SMT Reflow Soldering Instructions



❖Recommended Soldering Pattern (Units: mm ; Tolerance: ± 0.1)



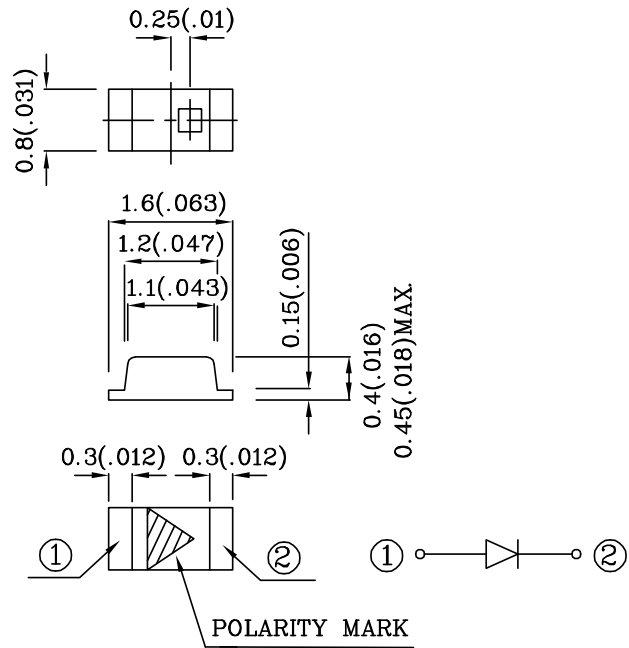
❖Tape Specification (Units : mm)



PACKAGE : 2000PCS / REEL.

Features

- 1.6mmx0.8mm SMT LED, 0.45mm MAX. THICKNESS.
- LOW POWER CONSUMPTION.
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- PACKAGE : 2000PCS / REEL.
- ROHS COMPLIANT.



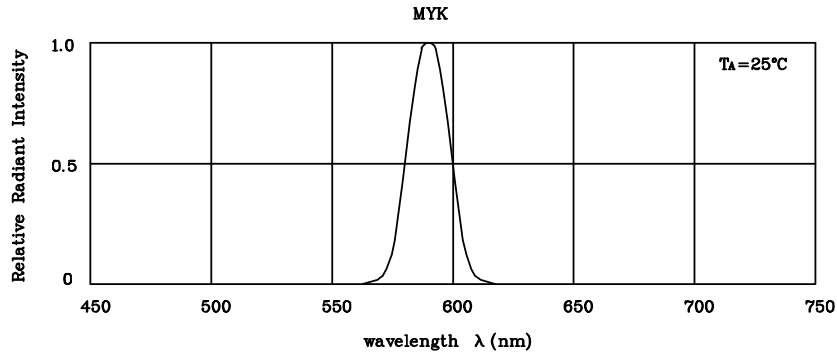
Notes:

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

Absolute maximum ratings ($T_A=25^\circ\text{C}$)		MYK (InGaAlP)	Unit
Reverse voltage	V_R	5	V
Forward current	I_F	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i_{FS}	175	mA
Power dissipation	P_T	125	mW
Operating temperature	T_A	-40 ~ +85	°C
Storage temperature	T_{stg}	-40 ~ +85	

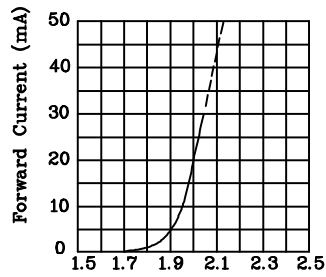
Operating Characteristics ($T_A=25^\circ\text{C}$)		MYK (InGaAlP)	Unit
Forward voltage (typ.) ($I_F=20\text{mA}$)	V_F	2.0	V
Forward voltage (max.) ($I_F=20\text{mA}$)	V_F	2.5	V
Reverse current ($V_R=5\text{V}$)	I_R	10	μA
Wavelength at peak emission ($I_F=20\text{mA}$)	λ_{peak}	590	nm
Wavelength at Dominate emission ($I_F=20\text{mA}$)	λ_D	590	nm
Spectral Line half-width ($I_F=20\text{mA}$)	$\Delta\lambda$	20	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	20	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ($I_F=20\text{mA}$) med		Wavelength nm λ_P	Viewing Angle 2θ 1/2
				min.	typ.		
XZMYK53W-3	Yellow	InGaAlP	Water Clear	18	49	590	120°
Published Date : SEP 23,2004 Drawing No :XDSA4058 V2 Checked : B.L.LIU P.1/3							

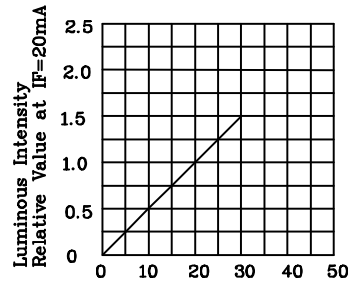


RELATIVE INTENSITY Vs. WAVELENGTH

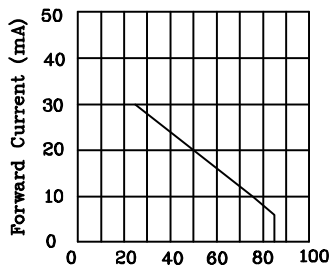
❖ MYK



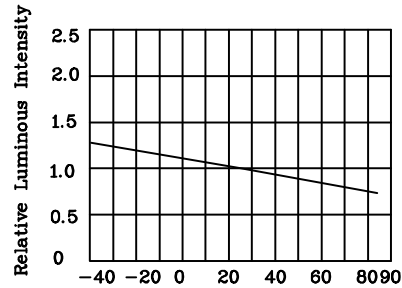
FORWARD CURRENT Vs. FORWARD VOLTAGE



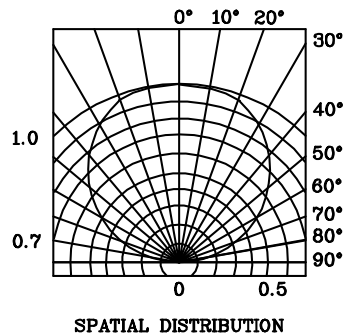
LUMINOUS INTENSITY Vs. FORWARD CURRENT



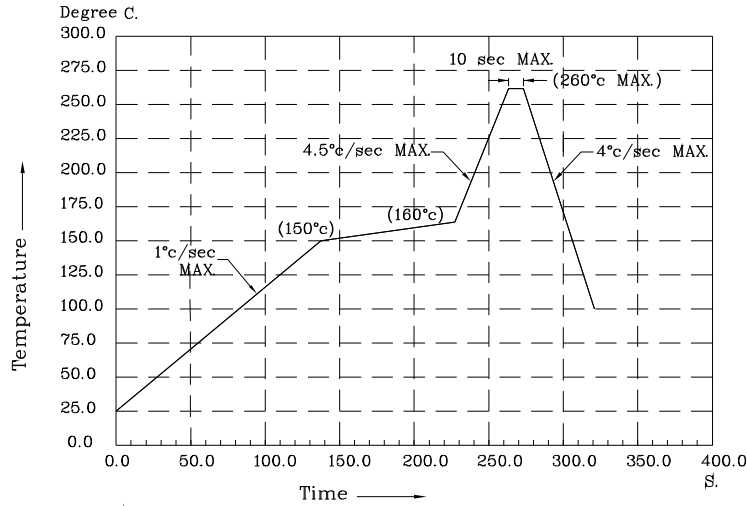
FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



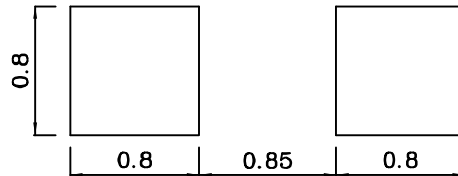
REFLOW SOLDERING INSTRUCTIONS
FOR LEAD-FREE SMT PROCESS



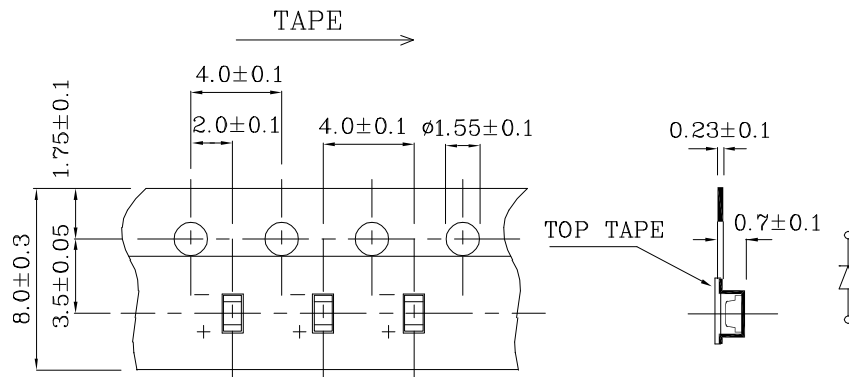
NOTES:

- 1, We recommend the reflow temperature 245°C~260°C. The maximum soldering temperature should be limited to 260°C.
- 2, Don't cause stress to the epoxy resin while it is exposed to high temperature.

❖ Recommended Soldering Pattern (Units: mm ; Tolerance: ± 0.1)

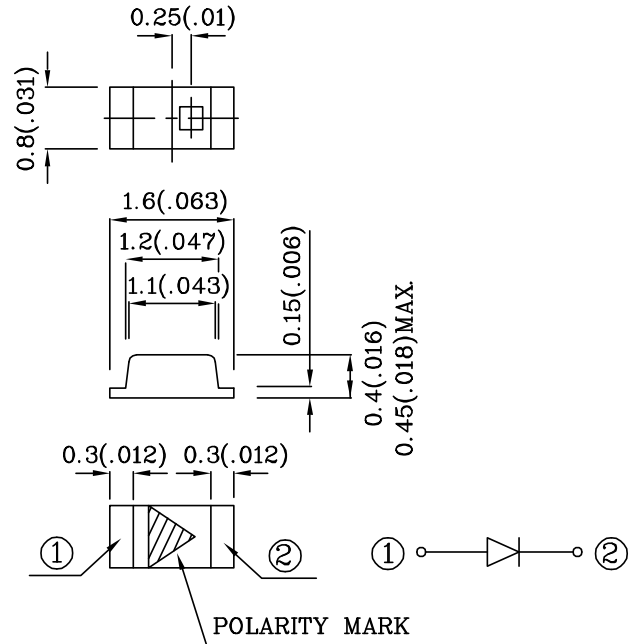


❖ Tape Specification (Units : mm)



Features

- 1.6mmx0.8mm SMT LED, 0.45mm MAX. THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
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- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.
- ROHS COMPLIANT.



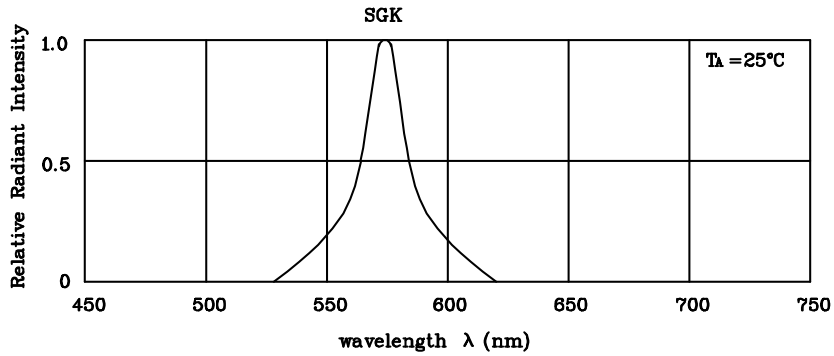
Notes:

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

Absolute maximum ratings ($T_A=25^\circ\text{C}$)		SGK (InGaAlP)	Unit
Reverse voltage	V_R	5	V
Forward current	I_F	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i_{FS}	150	mA
Power dissipation	P_T	105	mW
Operating temperature	T_A	-40 ~ +85	°C
Storage temperature	T_{stg}	-40 ~ +85	

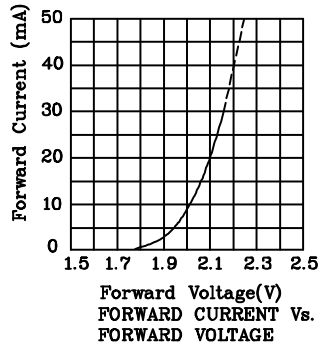
Operating Characteristics ($T_A=25^\circ\text{C}$)		SGK (InGaAlP)	Unit
Forward voltage (typ.) ($I_F=20\text{mA}$)	V_F	2.1	V
Forward voltage (max.) ($I_F=20\text{mA}$)	V_F	2.5	V
Reverse current ($V_R=5\text{V}$)	I_R	10	μA
Wavelength at peak emission ($I_F=20\text{mA}$)	λ_{peak}	574	nm
Wavelength at Dominate emission ($I_F=20\text{mA}$)	λ_D	570	nm
Spectral Line half- width ($I_F=20\text{mA}$)	$\Delta\lambda$	20	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	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.		
XZSGK53W-3	Green	InGaAlP	Water Clear	18	58	574	120°
Published Date : SEP 23,2004				Drawing No : XDSA0562		V2 Checked : B.L.LIU P.1/3	

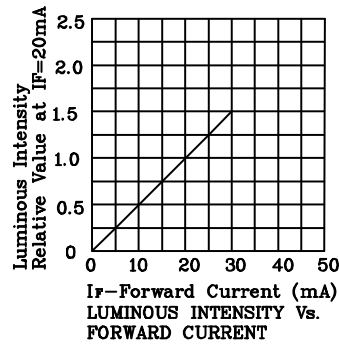


RELATIVE INTENSITY Vs. WAVELENGTH

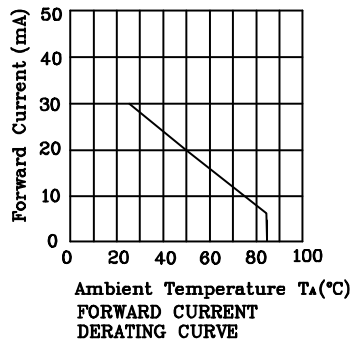
❖ SGK



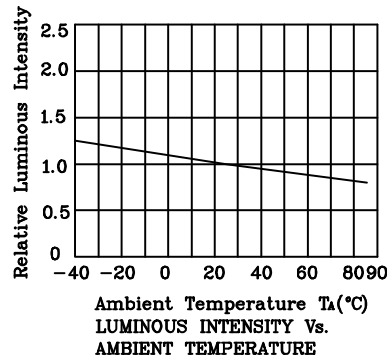
FORWARD CURRENT Vs. FORWARD VOLTAGE



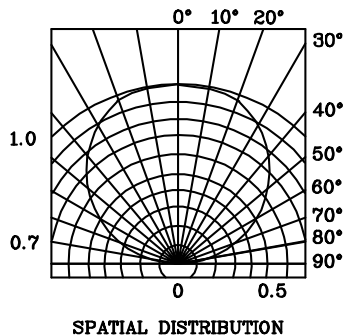
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE

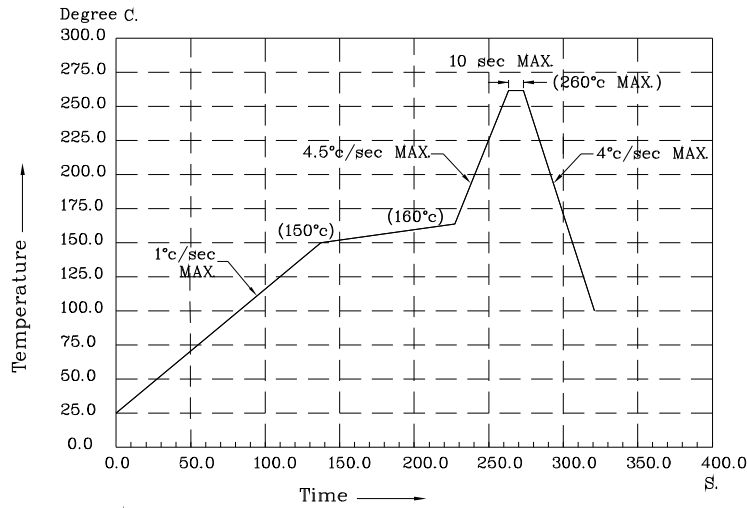


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

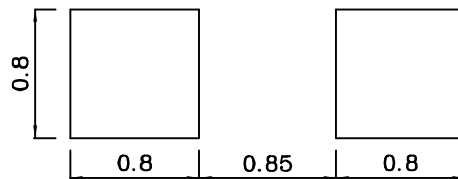
REFLOW SOLDERING INSTRUCTIONS
FOR LEAD-FREE SMT PROCESS



NOTES:

- 1, We recommend the reflow temperature 245°C~260°C. The maximum soldering temperature should be limited to 260°C.
- 2, Don't cause stress to the epoxy resin while it is exposed to high temperature.

❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



❖ Tape Specification (Units : mm)

