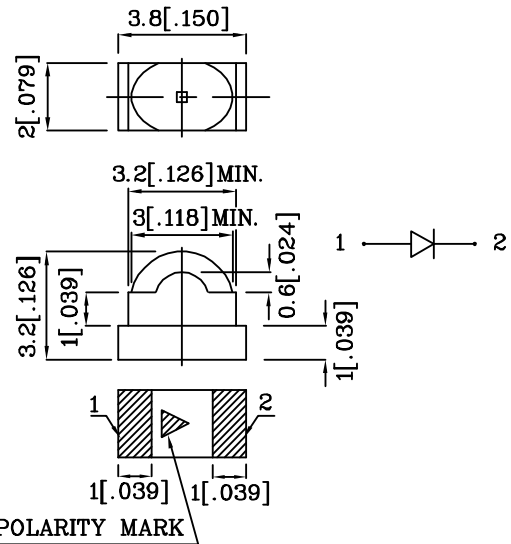


### Features

- 3.8mmx2.0mm SMT LED,3.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
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DEVICES



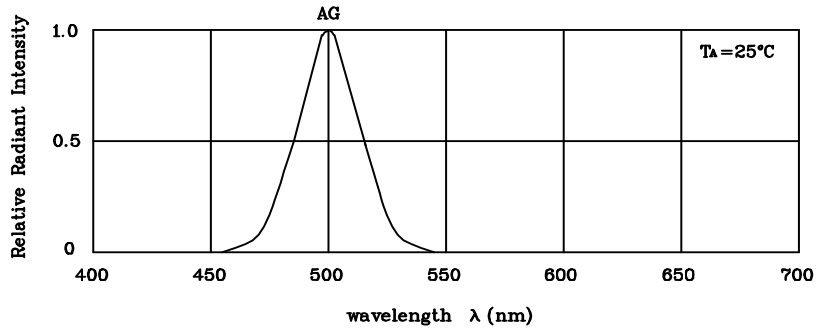
### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		AG (InGaN)	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	$P_T$	110	mW
Operating temperature	$T_A$	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40 ~ +85	

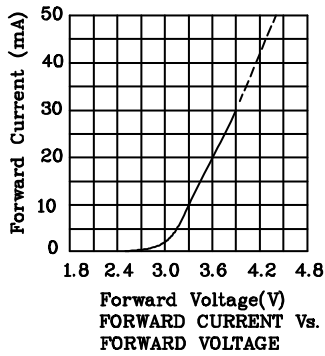
Operating Characteristics ( $T_A=25^\circ\text{C}$ )		AG (InGaN)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	3.6	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	4.4	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	500	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	505	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	30	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	56	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZAG79W	Green	InGaN	Water Clear	180	449	500	60° (H) 35° (V)

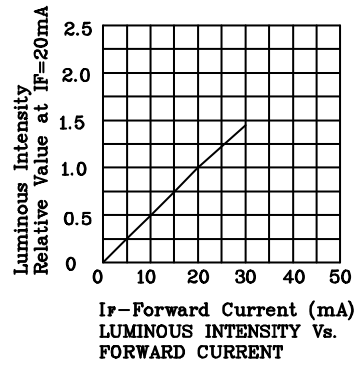


RELATIVE INTENSITY Vs. WAVELENGTH

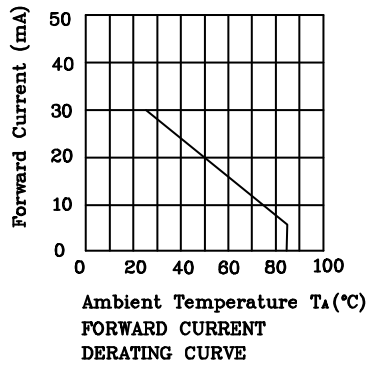
❖ AG



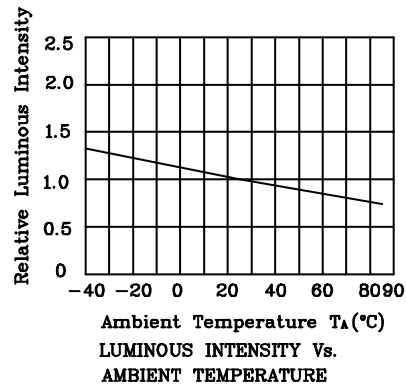
FORWARD CURRENT Vs. FORWARD VOLTAGE



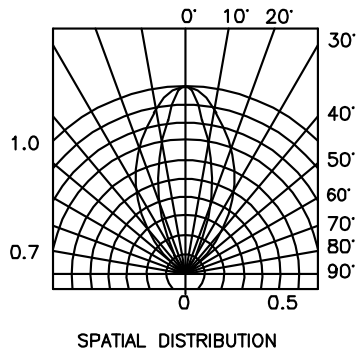
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE

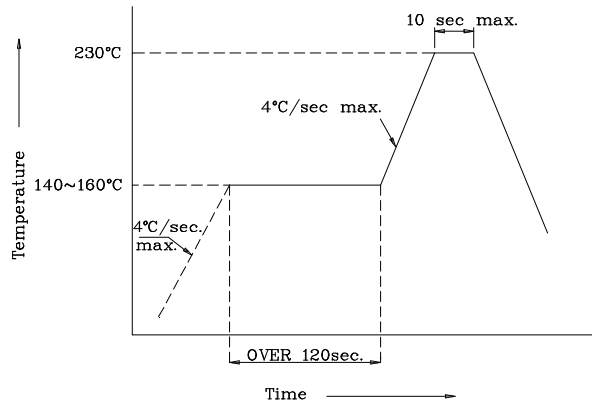


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

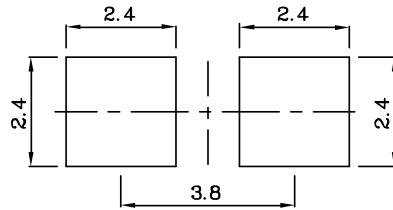


SPATIAL DISTRIBUTION

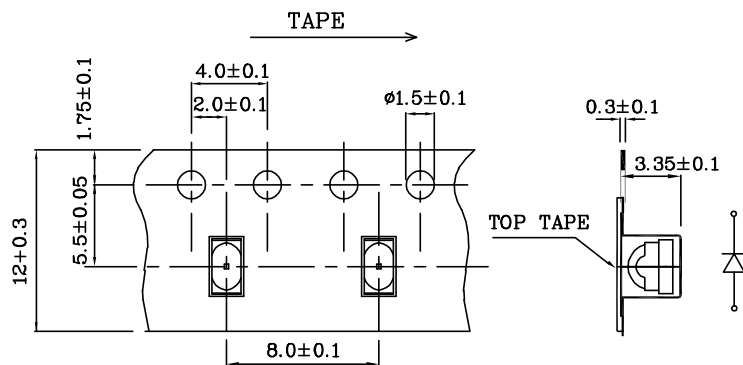
❖ SMT Reflow Soldering Instructions



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



❖ Tape Specification (Units : mm)

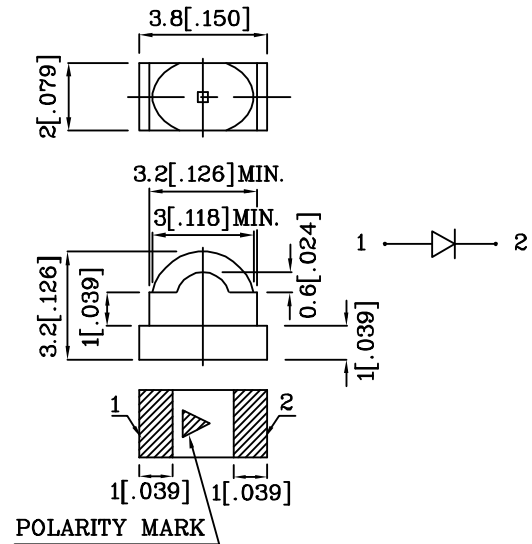


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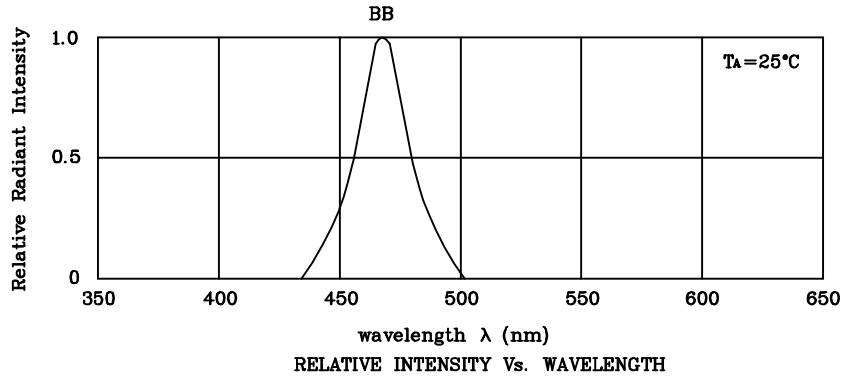
### Notes:

1. All dimensions are in millimeters (inches).
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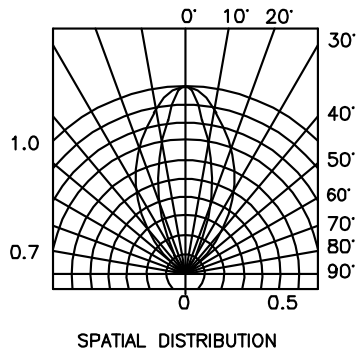
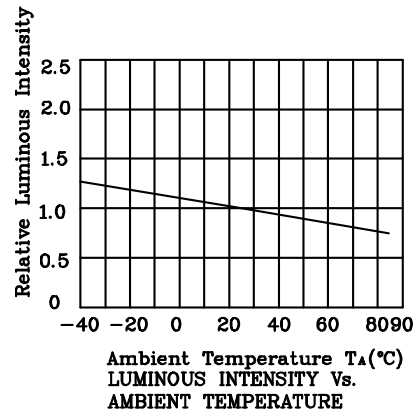
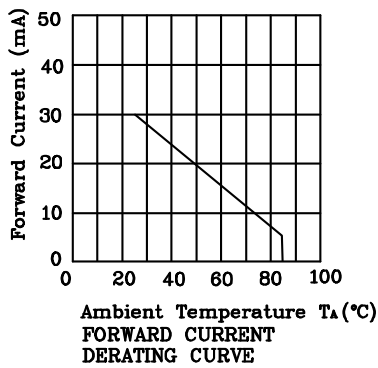
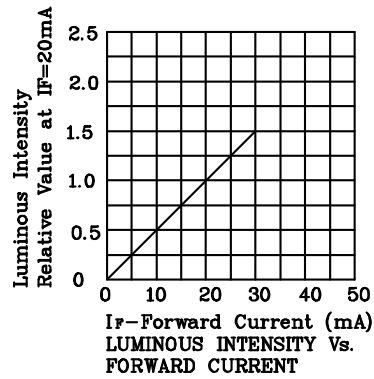
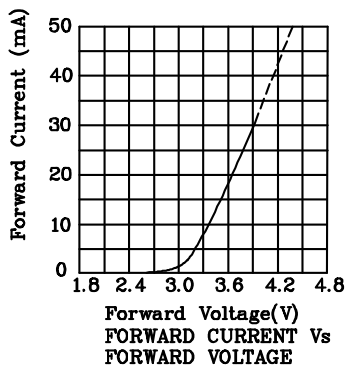
Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		BB (InGaN)	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	$i_{FS}$	160	mA
Power dissipation	$P_T$	102	mW
Operating temperature	$T_A$	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40 ~ +85	

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		BB (InGaN)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	3.65	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	4.2	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	468	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	470	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	25	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	65	pF

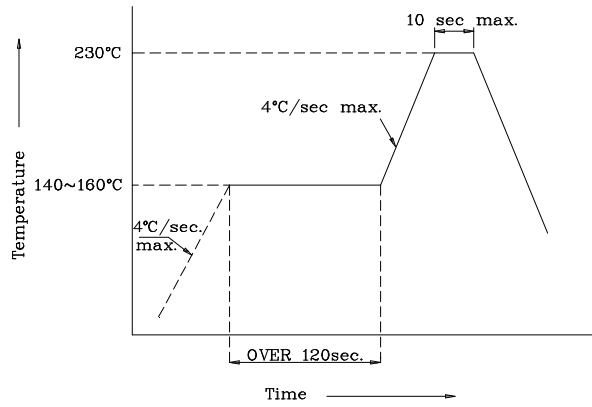
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZBB79W	Blue	InGaN	Water Clear	50	149	468	60° (H) 35° (V)



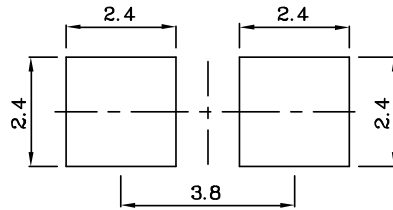
❖ BB



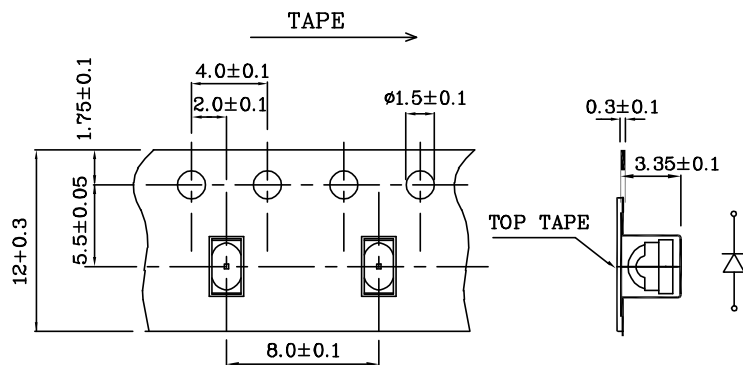
❖ SMT Reflow Soldering Instructions



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



❖ Tape Specification (Units : mm)

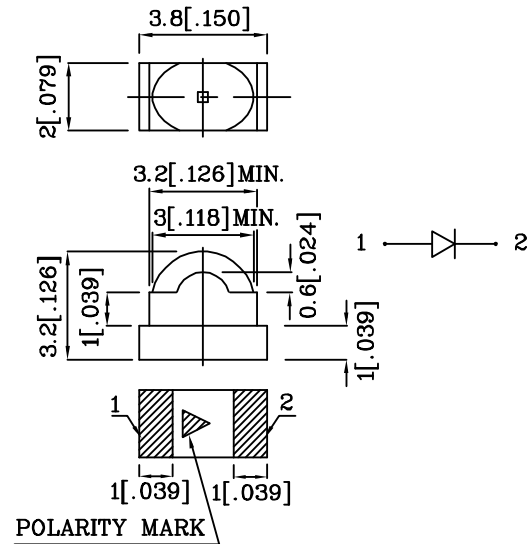


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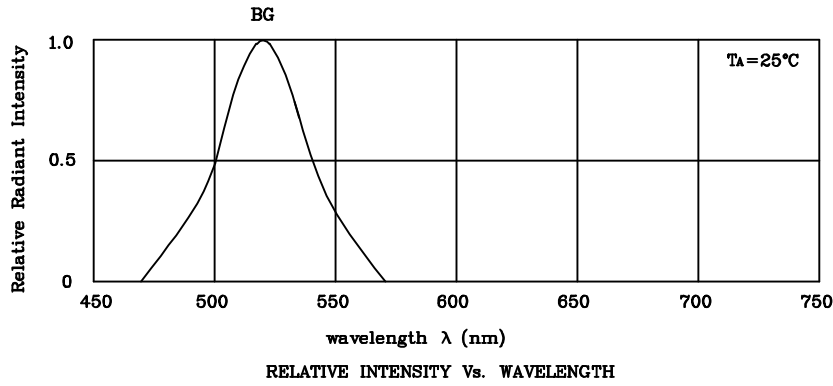
### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

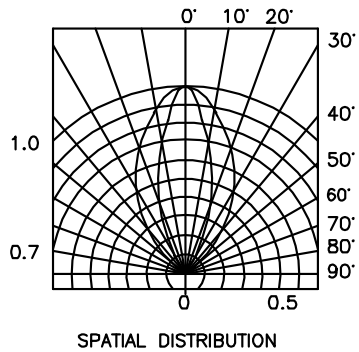
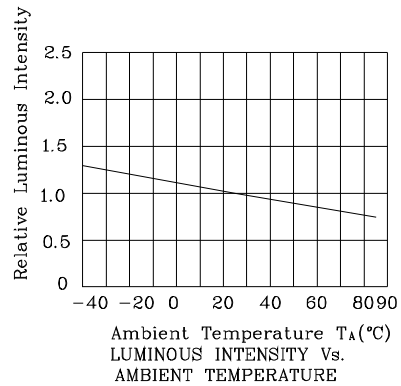
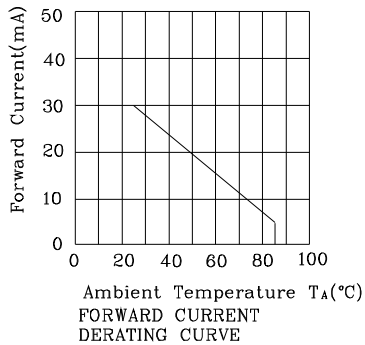
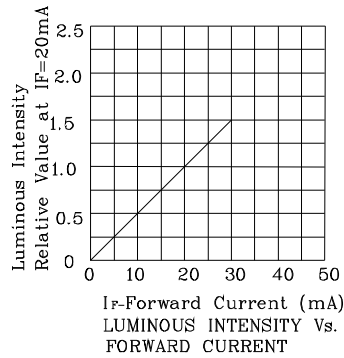
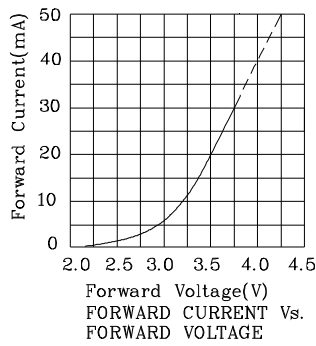
Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		BG (InGaN)	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	$i_{FS}$	150	mA
Power dissipation	$P_T$	105	mW
Operating temperature	$T_A$	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40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

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		BG (InGaN)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	3.5	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	4.5	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	520	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	525	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	38	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZBG79W	Green	InGaN	Water Clear	110	299	520	60° (H) 35° (V)

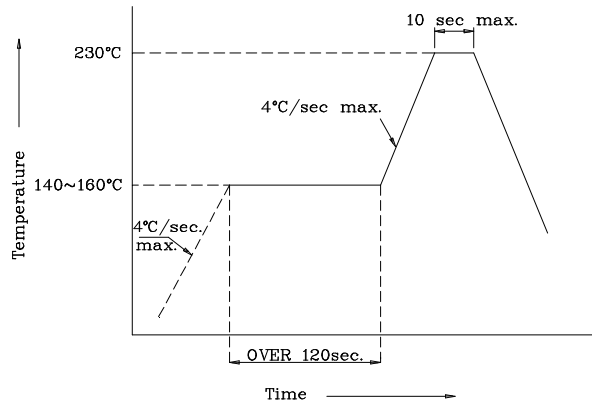


❖ **BG**

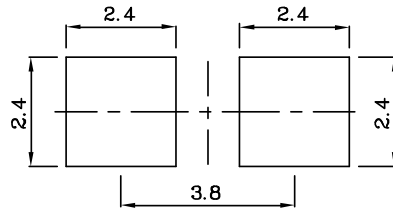




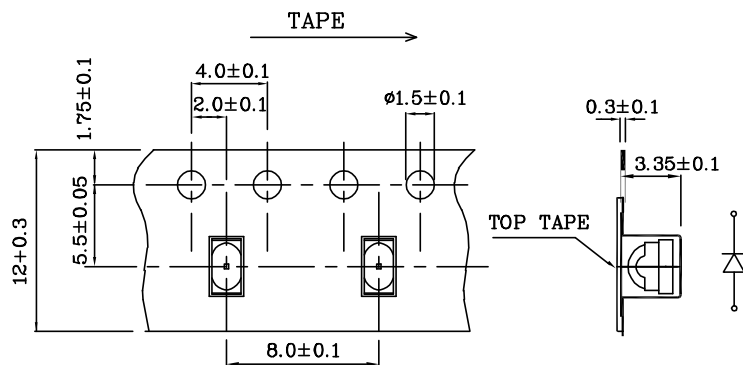
❖ SMT Reflow Soldering Instructions



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



❖ Tape Specification (Units : mm)

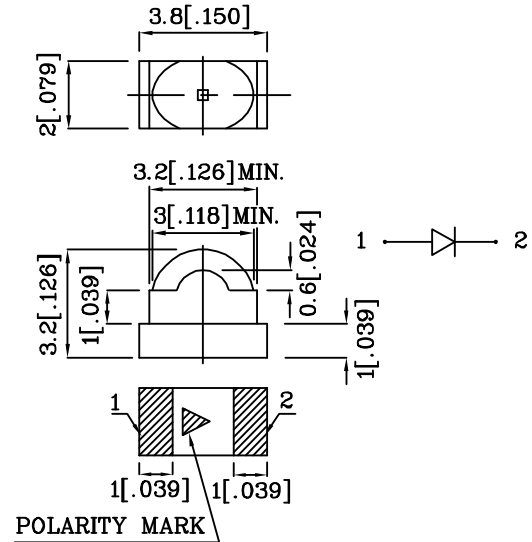


### Features

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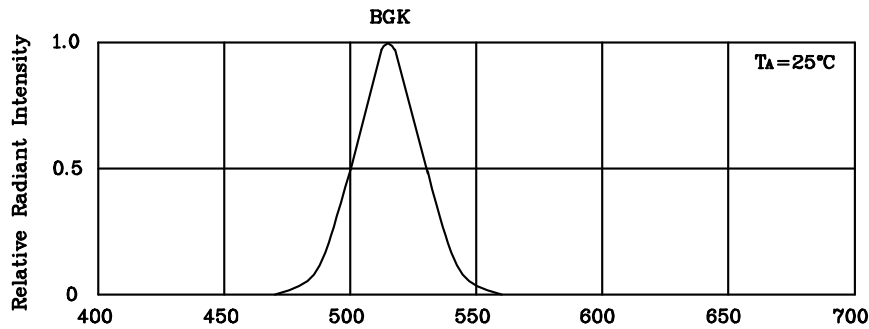
### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

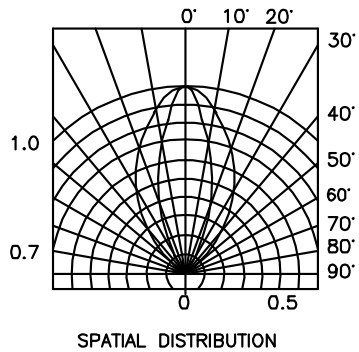
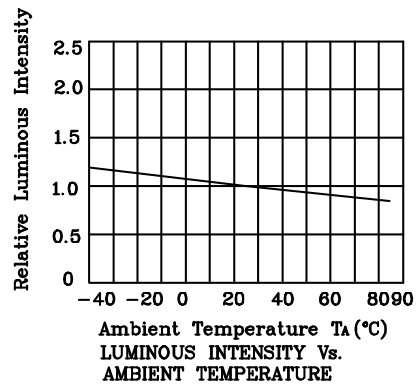
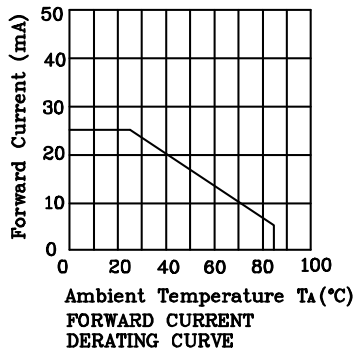
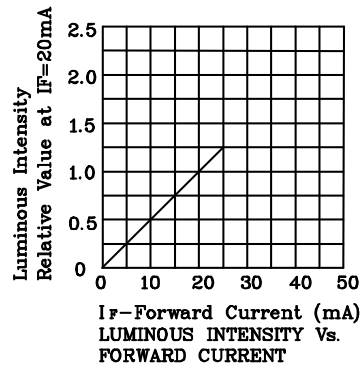
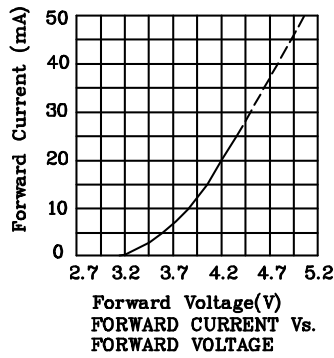
Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		BGK (InGaN)	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	25	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	$i_{FS}$	130	mA
Power dissipation	$P_T$	105	mW
Operating temperature	$T_A$	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40 ~ +85	

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		BGK (InGaN)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	4.2	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	4.8	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	515	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	525	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	30	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	45	pF

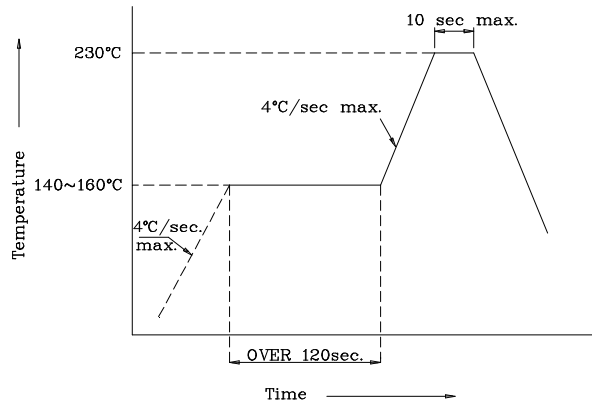
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZBGK79W	Green	InGaN	Water Clear	110	299	515	60° (H) 35° (V)



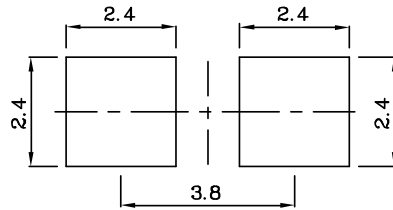
❖ **BGK**



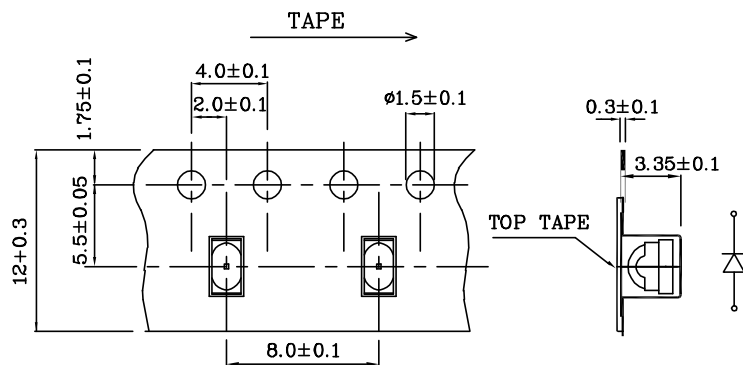
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❖ Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)

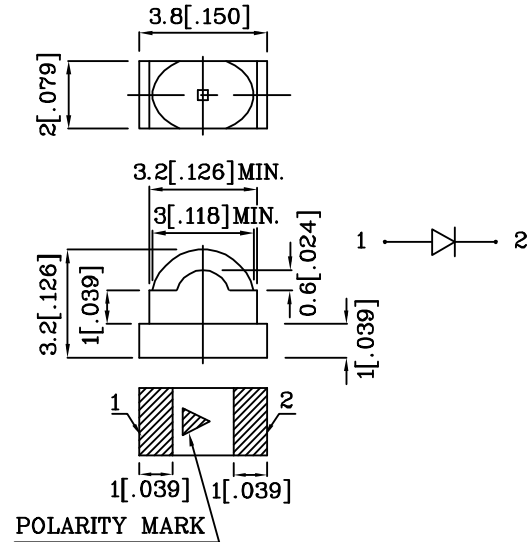


❖ Tape Specification (Units : mm)



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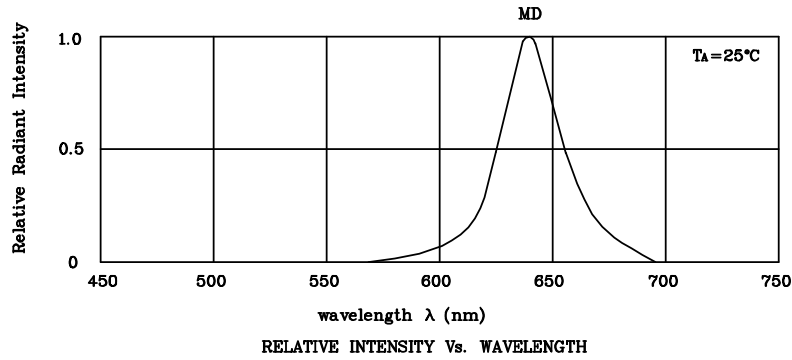
Notes:

1. All dimensions are in millimeters (inches).
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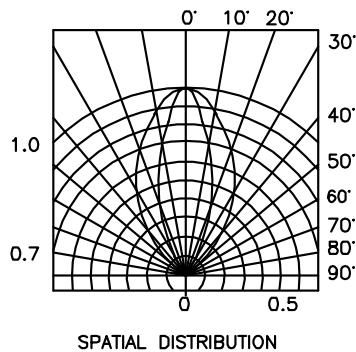
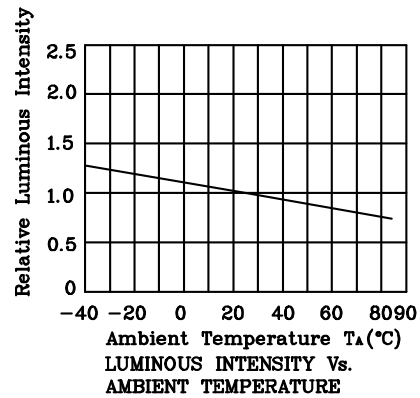
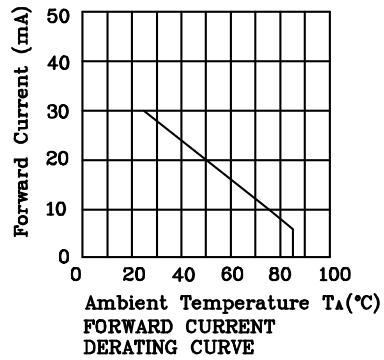
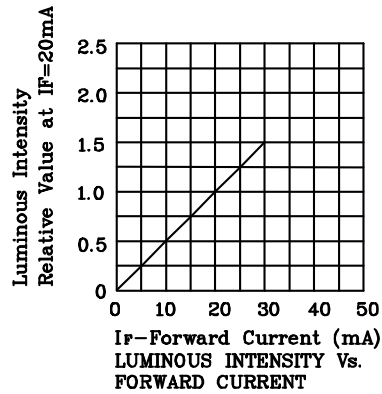
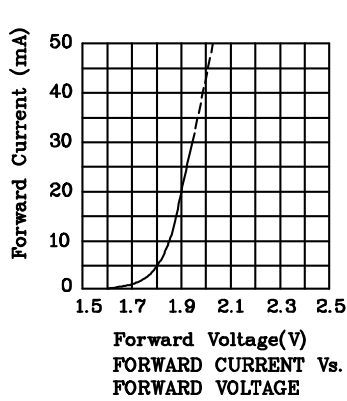
Absolute maximum ratings (TA=25°C)		MD (InGaAlP)	Unit
Reverse voltage	V <sub>R</sub>	5	V
Forward current	I <sub>F</sub>	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i <sub>FS</sub>	185	mA
Power dissipation	P <sub>T</sub>	170	mW
Operating temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage temperature	T <sub>stg</sub>	-40 ~ +85	

Operating Characteristics (TA=25°C)		MD (InGaAlP)	Unit
Forward voltage (typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	1.9	V
Forward voltage (max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	2.5	V
Reverse current (V <sub>R</sub> =5V)	I <sub>R</sub>	10	µA
Wavelength at peak emission (I <sub>F</sub> =20mA)	λ <sub>peak</sub>	640	nm
Wavelength at Dominate emission (I <sub>F</sub> =20mA)	λ <sub>D</sub>	628	nm
Spectral Line half-width (I <sub>F</sub> =20mA)	Δλ	27	nm
Capacitance (V <sub>F</sub> =0V, f=1MHz)	C	45	pF

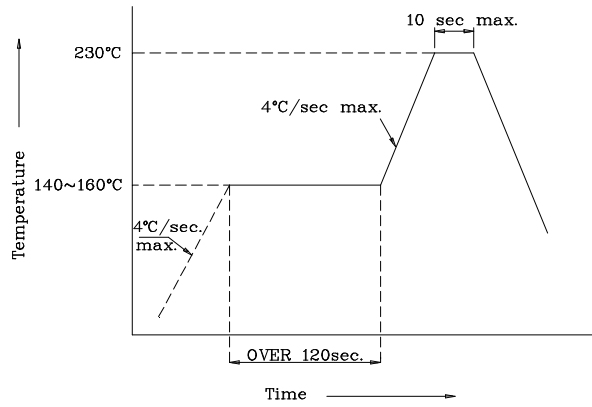
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZMD79W	Red	InGaAlP	Water Clear	18	499	640	60° (H) 35° (V)



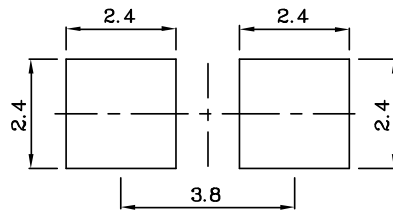
❖ MD



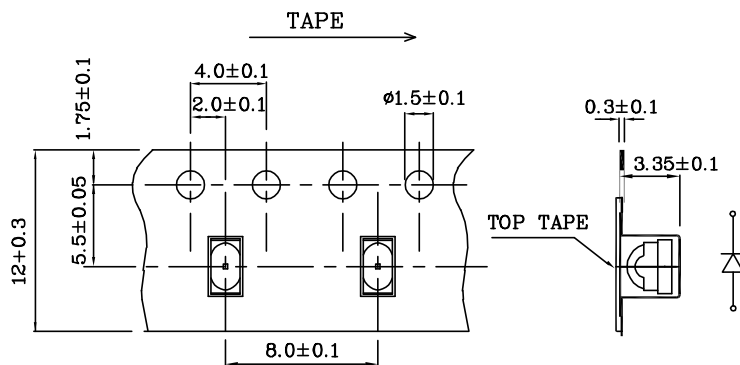
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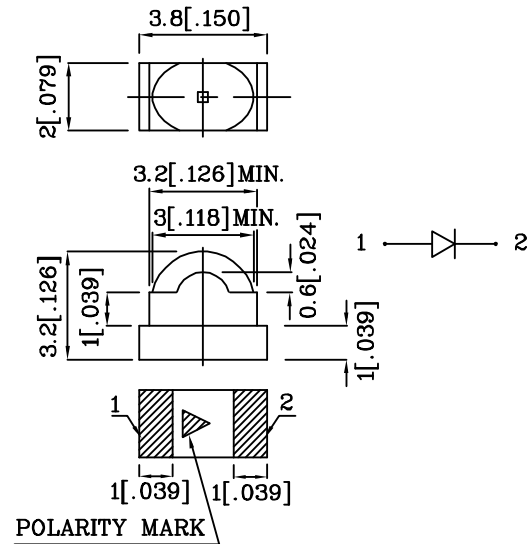


❖ Tape Specification (Units : mm)



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Notes:

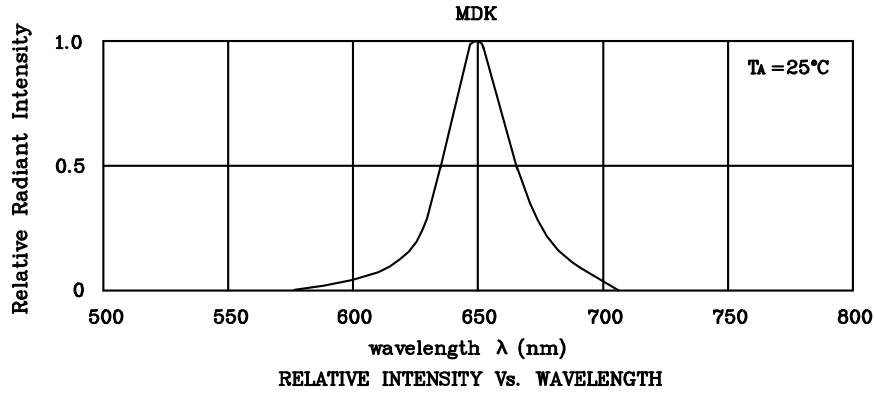
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

Absolute maximum ratings (TA=25°C)		MDK (InGaAlP)	Unit
Reverse voltage	V <sub>R</sub>	5	V
Forward current	I <sub>F</sub>	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	i <sub>FS</sub>	185	mA
Power dissipation	P <sub>T</sub>	170	mW
Operating temperature	T <sub>A</sub>	-40 ~ +85	°C
Storage temperature	T <sub>stg</sub>	-40 ~ +85	

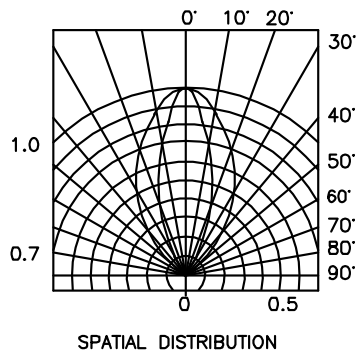
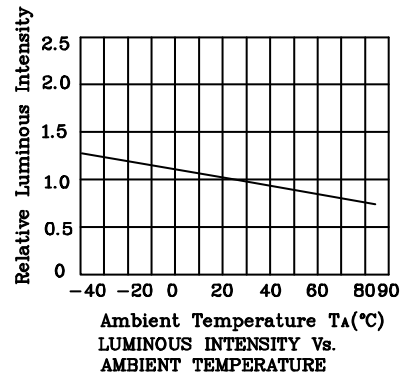
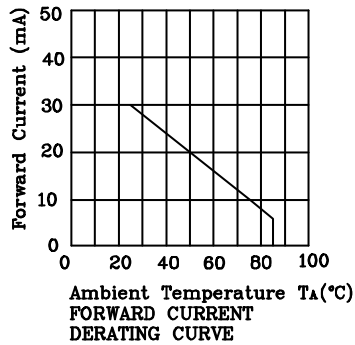
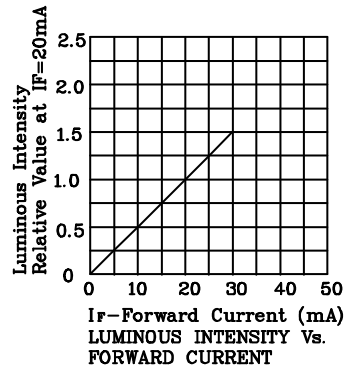
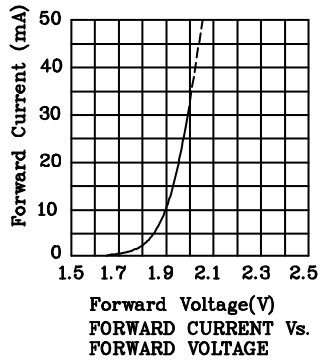
Operating Characteristics (TA=25°C)		MDK (InGaAlP)	Unit
Forward voltage (typ.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	1.95	V
Forward voltage (max.) (I <sub>F</sub> =20mA)	V <sub>F</sub>	2.5	V
Reverse current (V <sub>R</sub> =5V)	I <sub>R</sub>	10	µA
Wavelength at peak emission (I <sub>F</sub> =20mA)	λ <sub>peak</sub>	650	nm
Wavelength at Dominate emission (I <sub>F</sub> =20mA)	λ <sub>D</sub>	635	nm
Spectral Line half-width (I <sub>F</sub> =20mA)	Δλ	28	nm
Capacitance (V <sub>F</sub> =0V, f=1MHz)	C	35	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (I <sub>F</sub> =20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
XZMDK79W	Red	InGaAlP	Water Clear	18	449	650	60° (H) 35° (V)

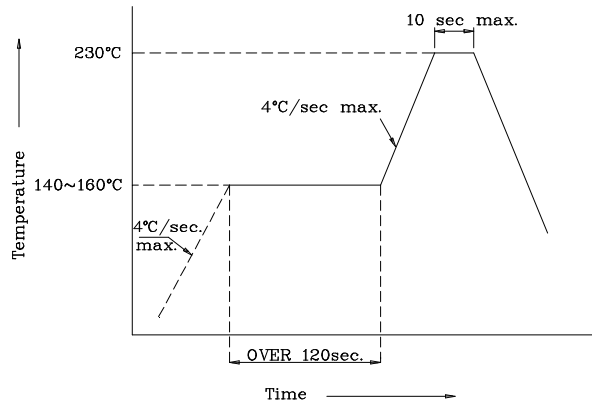




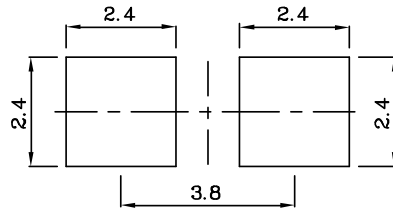
❖ MDK



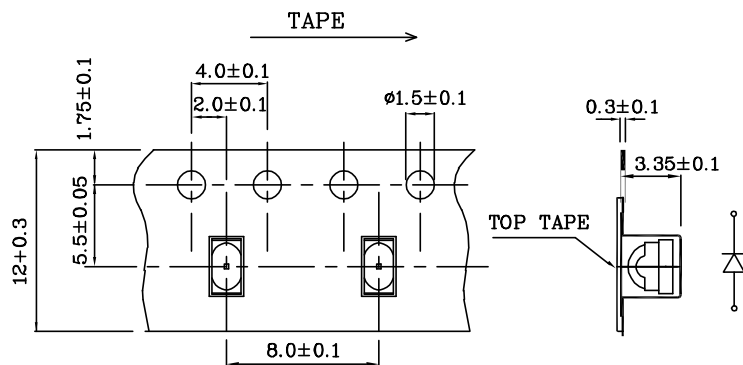
❖ SMT Reflow Soldering Instructions



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

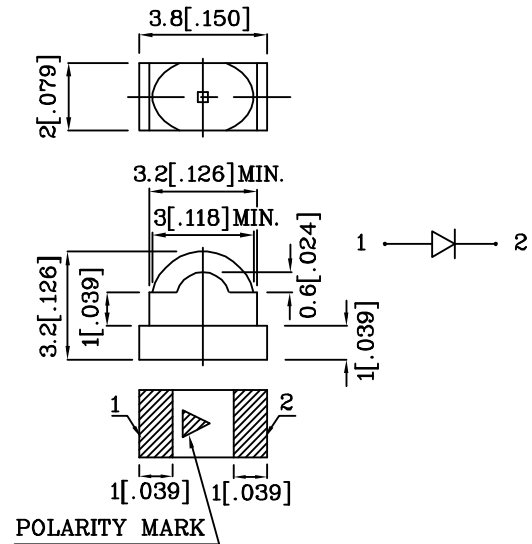


❖ Tape Specification (Units : mm)



### Features

- 3.8mmx2.0mm SMT LED,3.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 500PCS / REEL.



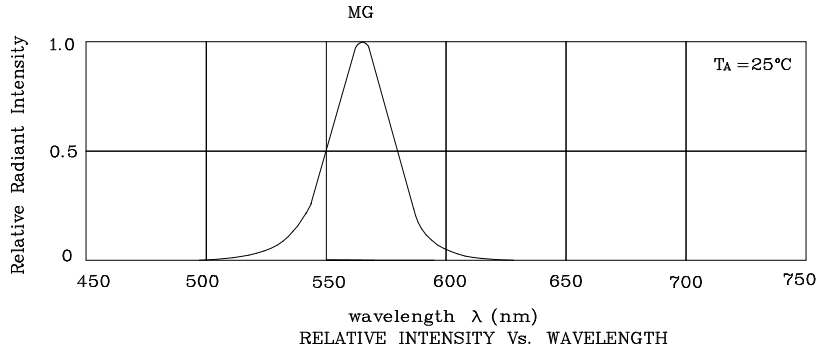
### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

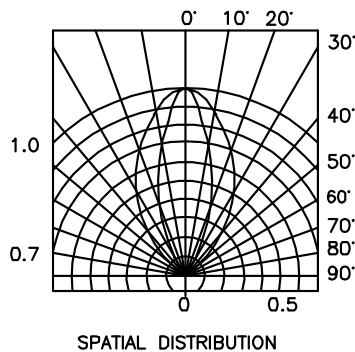
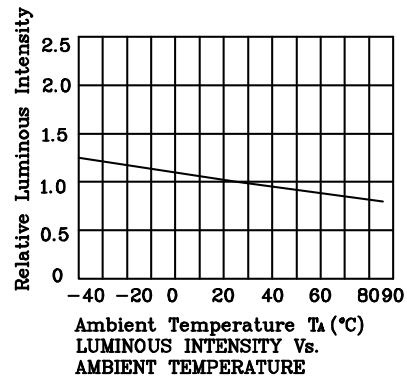
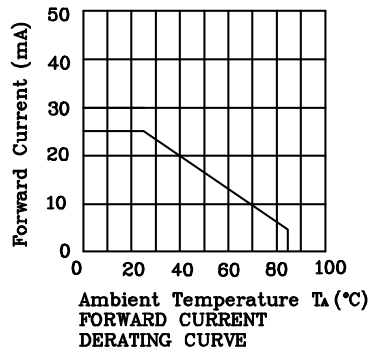
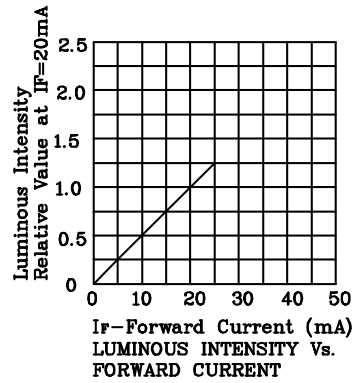
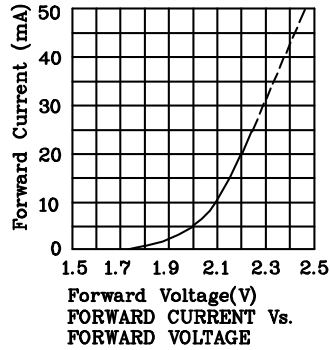
Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		MG (GaP)	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	25	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	$i_{FS}$	140	mA
Power dissipation	$P_T$	105	mW
Operating temperature	$T_A$	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40 ~ +85	

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		MG (GaP)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	2.2	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	2.5	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	565	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	568	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	30	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	15	pF

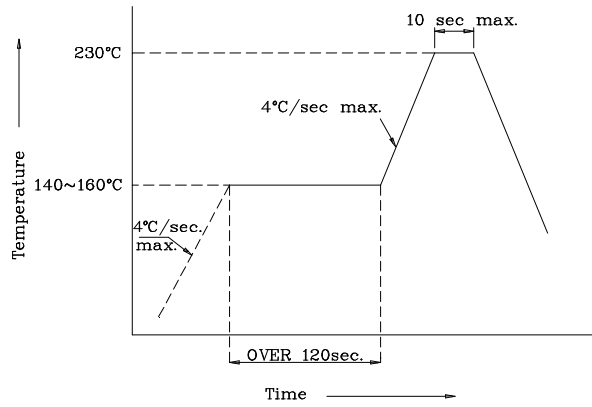
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZMG79W	Green	GaP	Water Clear	10	39	565	60° (H) 35° (V)



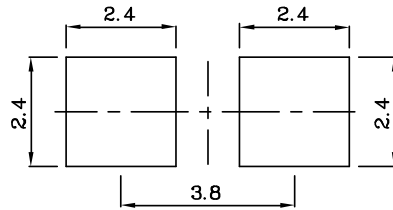
❖ MG



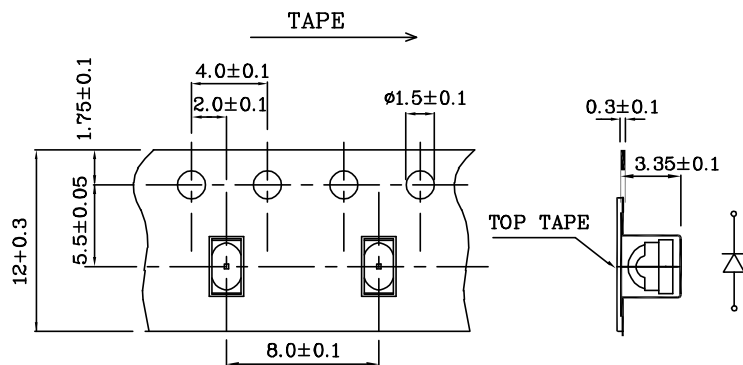
❖ SMT Reflow Soldering Instructions



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

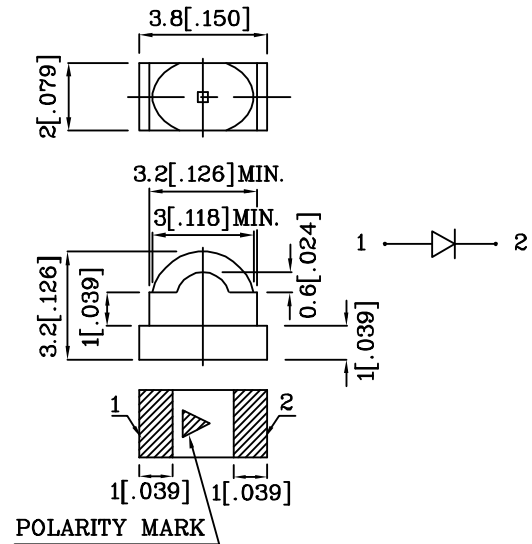


❖ Tape Specification (Units : mm)



**Features**

- 3.8mmx2.0mm SMT LED,3.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 500PCS / REEL.



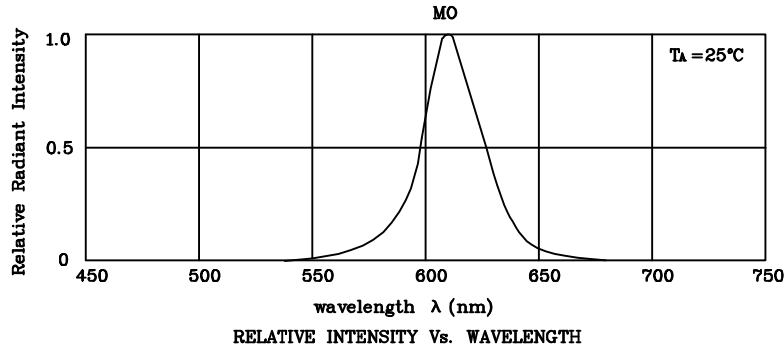
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

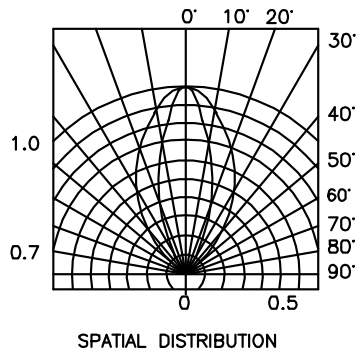
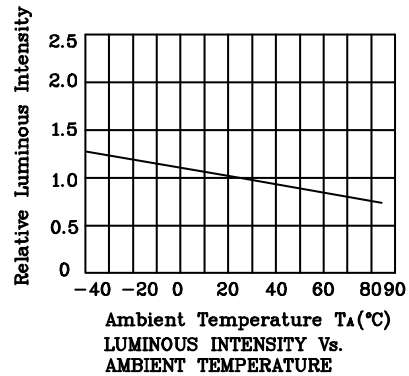
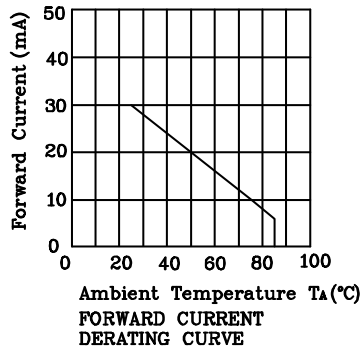
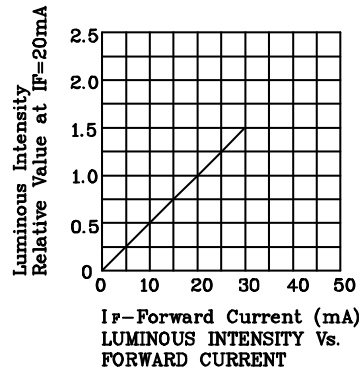
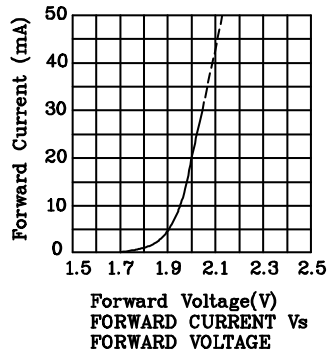
Absolute maximum ratings (TA=25°C)		MO (InGaAlP)	Unit
Reverse voltage	VR	5	V
Forward current	IF	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	iFS	195	mA
Power dissipation	PT	75	mW
Operating temperature	TA	-40 ~ +85	°C
Storage temperature	Tstg	-40 ~ +85	

Operating Characteristics (TA=25°C)		MO (InGaAlP)	Unit
Forward voltage (typ.) (IF=20mA)	VF	2.0	V
Forward voltage (max.) (IF=20mA)	VF	2.5	V
Reverse current (VR=5V)	IR	10	uA
Wavelength at peak emission (IF=20mA)	$\lambda$ peak	610	nm
Wavelength at Dominate emission (IF=20mA)	$\lambda$ D	601	nm
Spectral Line half-width (IF=20mA)	$\Delta\lambda$	29	nm
Capacitance (VF=0V, f=1MHz)	C	30	pF

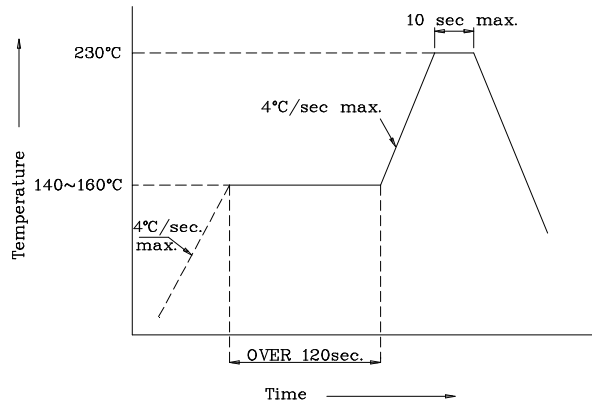
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm $\lambda$ P	Viewing Angle 2 $\theta$ 1/2
				min.	typ.		
XZMO79W	Orange	InGaAlP	Water Clear	480	799	610	60° (H) 35° (V)



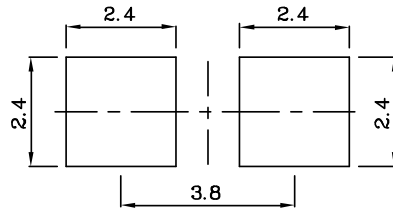
❖ MO



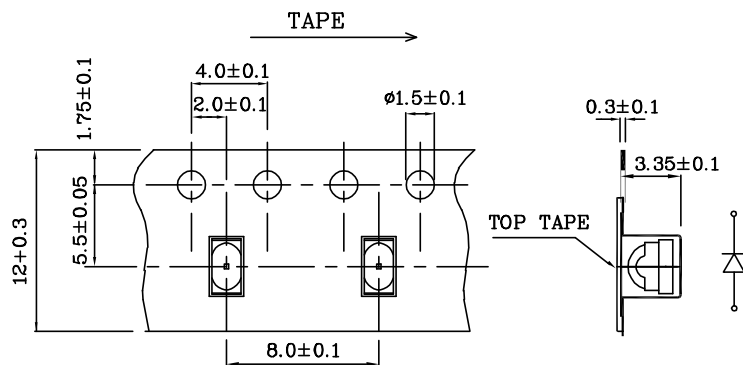
❖ SMT Reflow Soldering Instructions



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



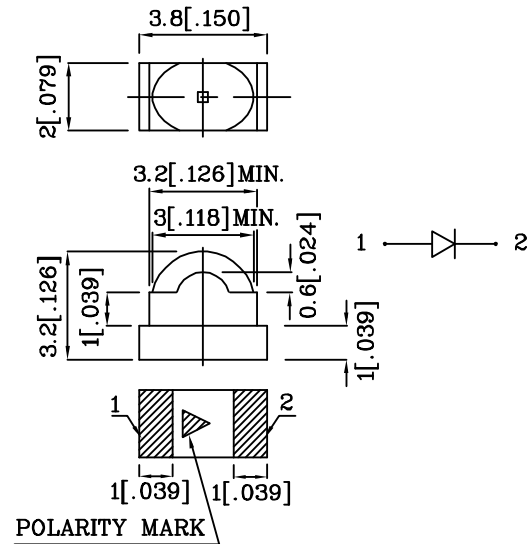
❖ Tape Specification (Units : mm)





**Features**

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- LOW POWER CONSUMPTION.
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- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 500PCS / REEL.



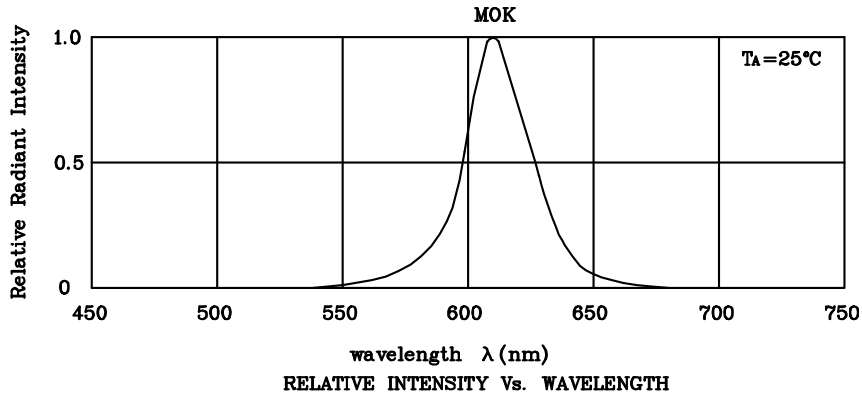
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

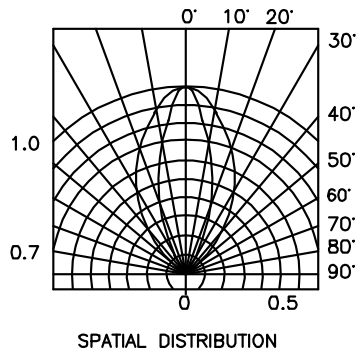
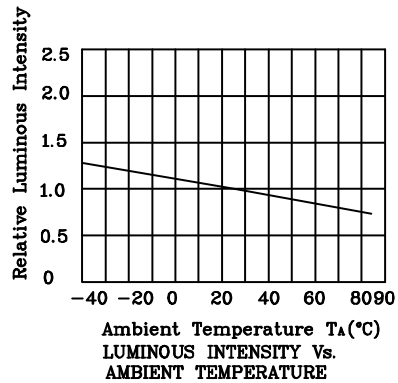
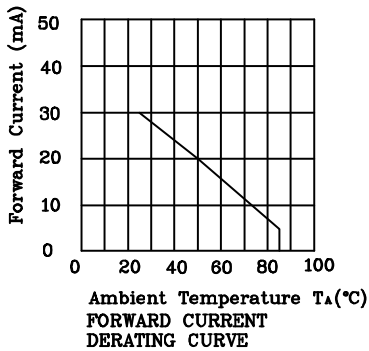
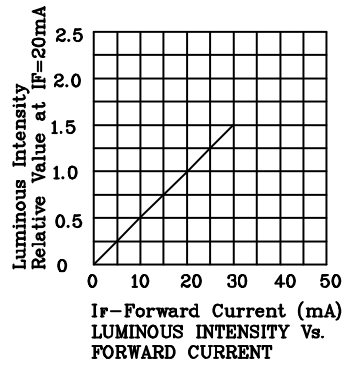
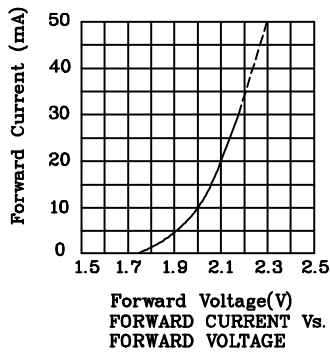
Absolute maximum ratings (TA=25°C)		MOK (InGaAlP)	Unit
Reverse voltage	VR	5	V
Forward current	IF	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	iFS	195	mA
Power dissipation	PT	75	mW
Operating temperature	TA	-40 ~ +85	°C
Storage temperature	Tstg	-40 ~ +85	

Operating Characteristics (TA=25°C)		MOK (InGaAlP)	Unit
Forward voltage (typ.) (IF=20mA)	VF	2.1	V
Forward voltage (max.) (IF=20mA)	VF	2.5	V
Reverse current (VR=5V)	IR	10	uA
Wavelength at peak emission (IF=20mA)	$\lambda$ peak	610	nm
Wavelength at Dominate emission (IF=20mA)	$\lambda$ D	601	nm
Spectral Line half-width (IF=20mA)	$\Delta\lambda$	29	nm
Capacitance (VF=0V, f=1MHz)	C	15	pF

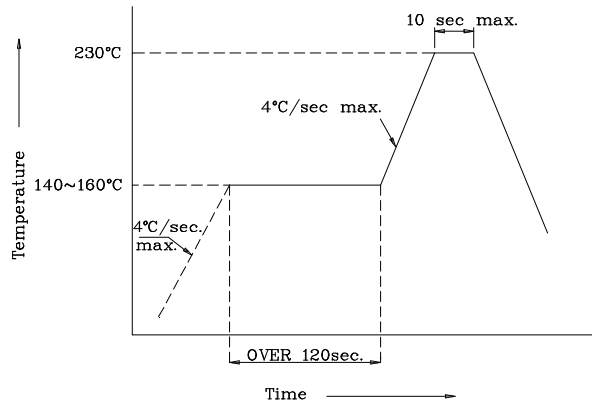
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm $\lambda$ P	Viewing Angle 2 $\theta$ 1/2
				min.	typ.		
XZMOK79W	Orange	InGaAlP	Water Clear	280	599	610	60° (H) 35° (V)



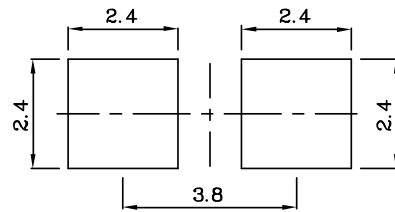
❖ MOK



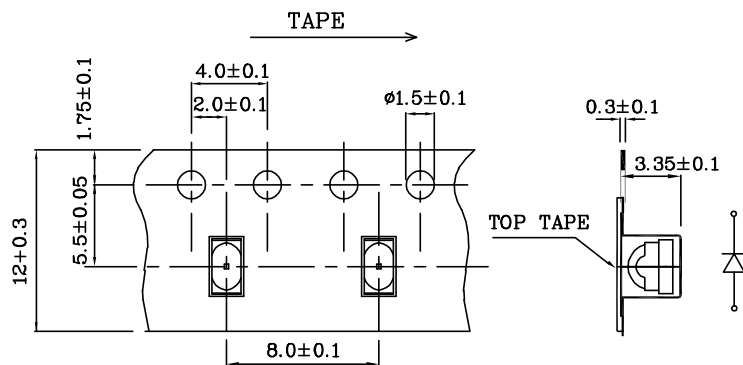
❖ SMT Reflow Soldering Instructions



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

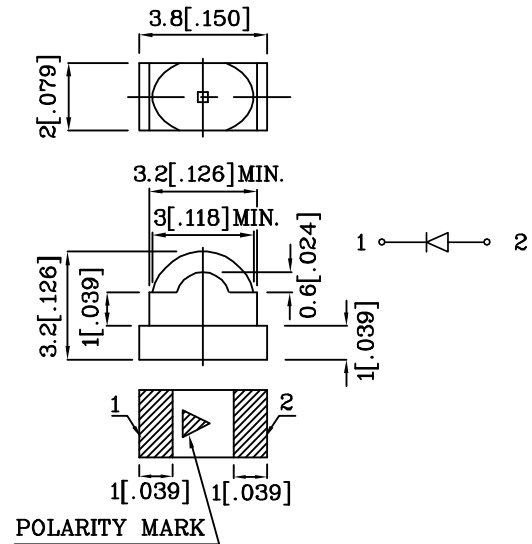


❖ Tape Specification (Units : mm)



**Features**

- 3.8mmx2.0mm SMT LED,3.2mm THICKNESS.
- LOW POWER CONSUMPTION.
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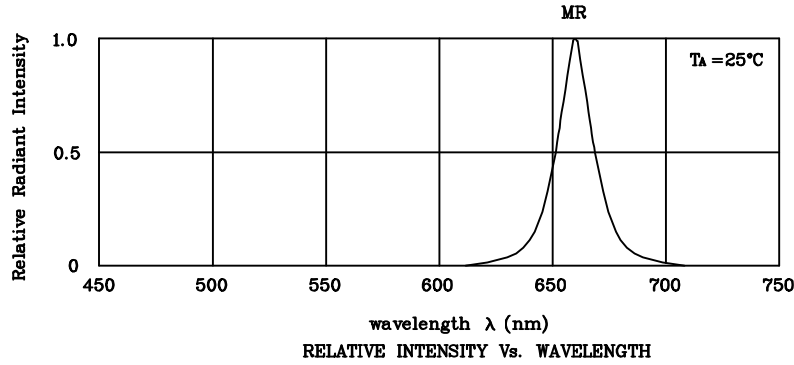
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

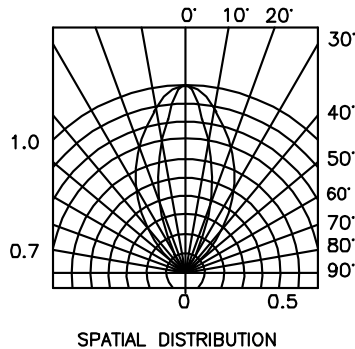
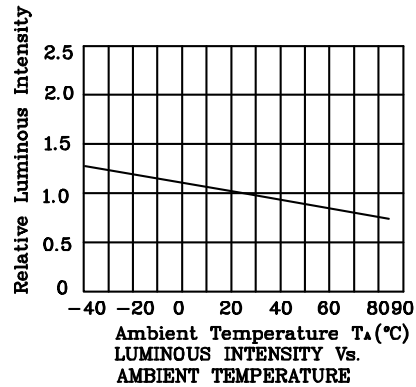
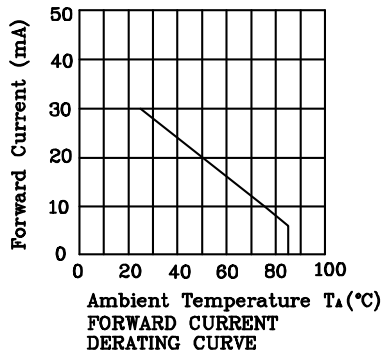
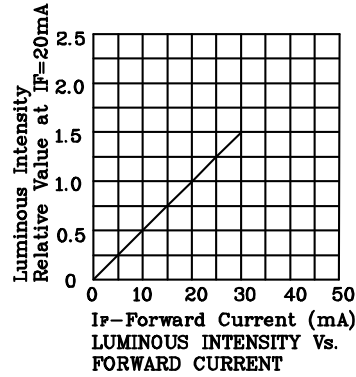
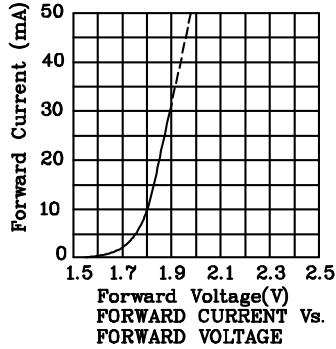
Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		MR (GaAlAs)	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	$i_{FS}$	155	mA
Power dissipation	$P_T$	100	mW
Operating temperature	$T_A$	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40 ~ +85	

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		MR (GaAlAs)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	1.85	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	2.5	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	660	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	640	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	20	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	45	pF

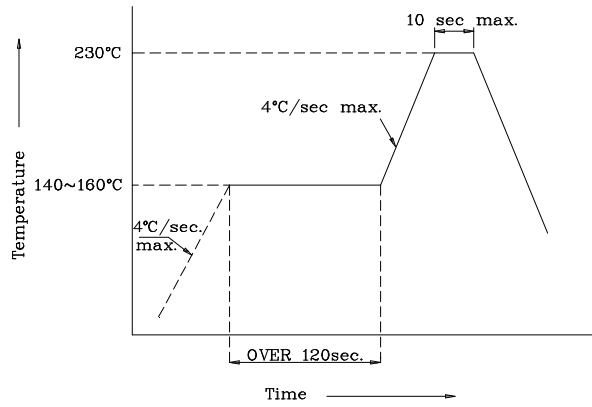
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZMR79W	Red	GaAlAs	Water Clear	110	239	660	60° (H) 35° (V)



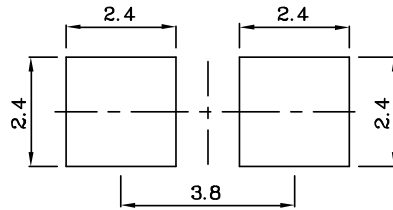
❖ MR



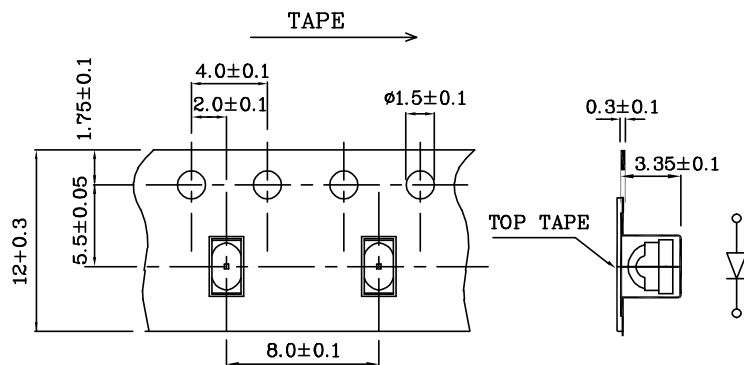
❖ SMT Reflow Soldering Instructions



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

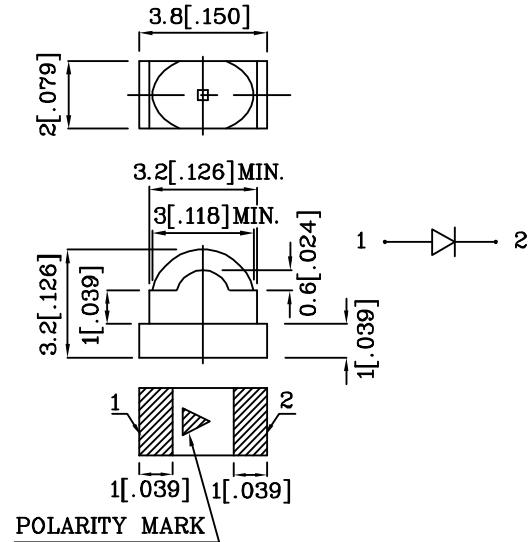


❖ Tape Specification (Units : mm)



**Features**

- 3.8mmx2.0mm SMT LED,3.2mm THICKNESS.
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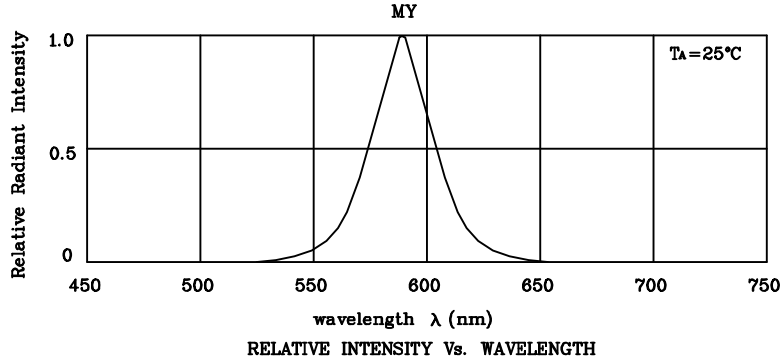
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

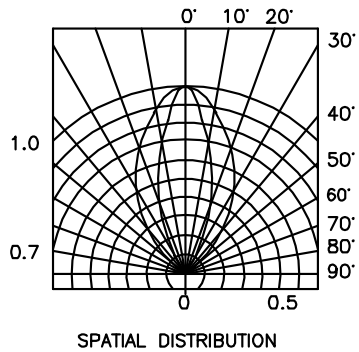
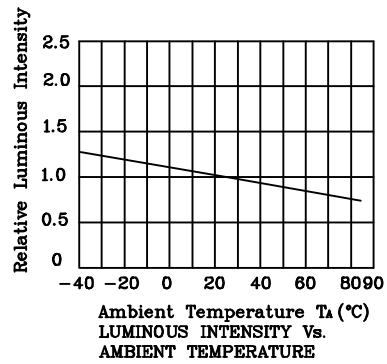
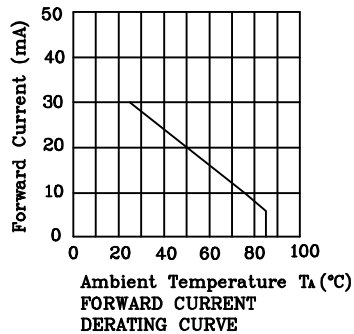
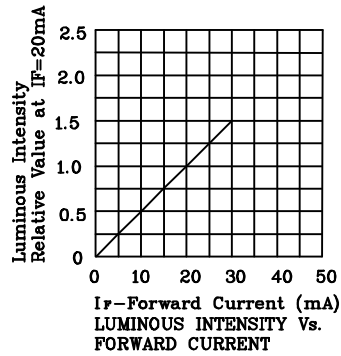
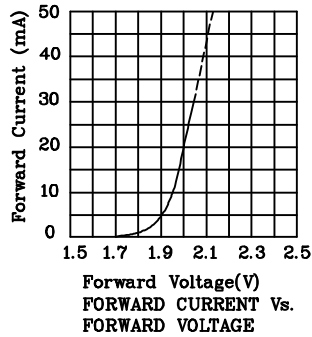
Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		MY (InGaAlP)	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	$i_{FS}$	150	mA
Power dissipation	$P_T$	125	mW
Operating temperature	$T_A$	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40 ~ +85	

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		MY (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	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	590	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	588	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	28	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	25	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZMY79W	Yellow	InGaAlP	Water Clear	110	249	590	60° (H) 35° (V)

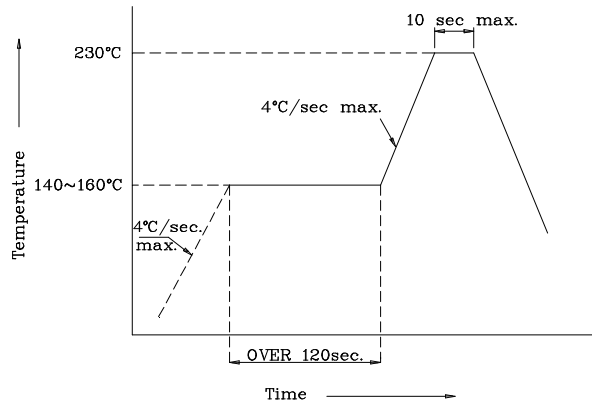


❖ MY

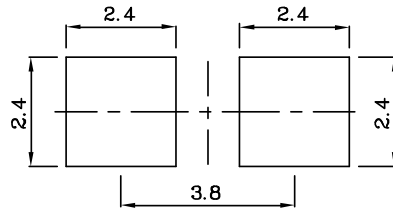




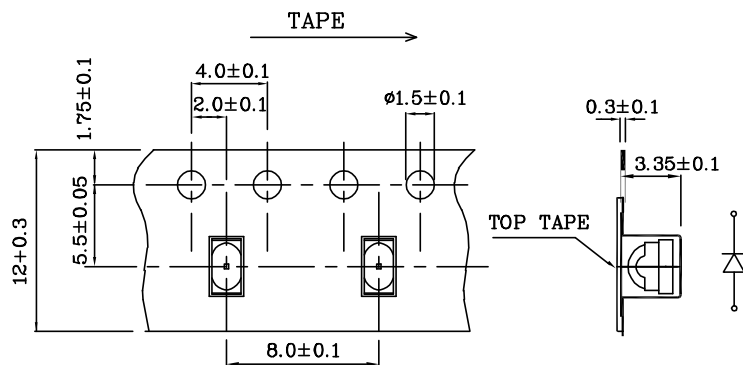
❖ SMT Reflow Soldering Instructions



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

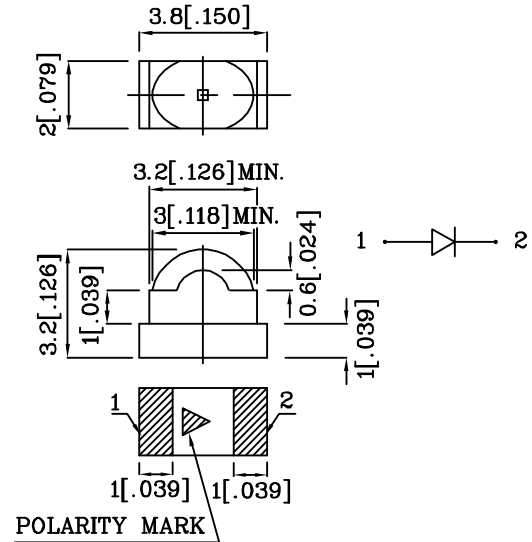


❖ Tape Specification (Units : mm)



**Features**

- 3.8mmx2.0mm SMT LED,3.2mm THICKNESS.
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- IDEAL FOR BACKLIGHT AND INDICATOR.
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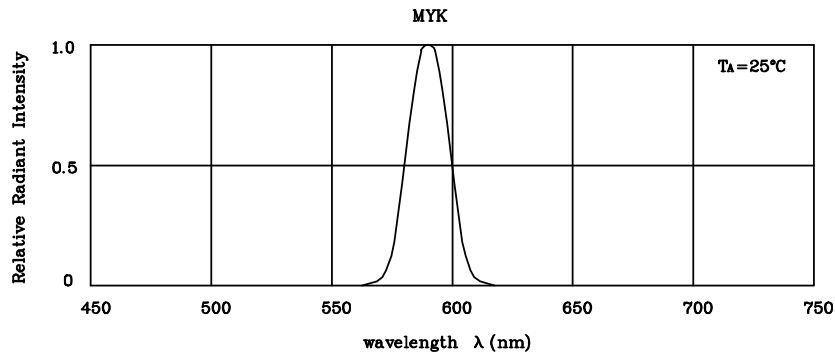
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  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	

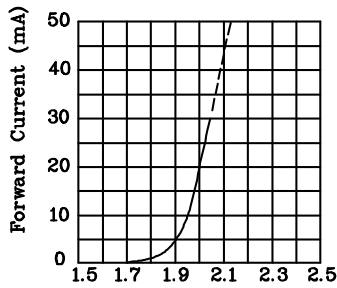
Operating Characteristics ( $T_A=25^\circ\text{C}$ )		MYK (InGaAlP)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	2.0	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	2.5	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	590	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	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 ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta$ 1/2
				min.	typ.		
XZMYK79W	Yellow	InGaAlP	Water Clear	70	199	590	60° (H) 35° (V)

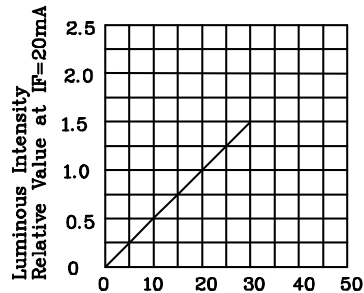


RELATIVE INTENSITY Vs. WAVELENGTH

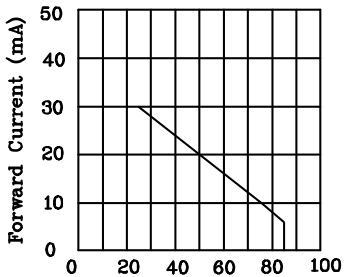
❖ MYK



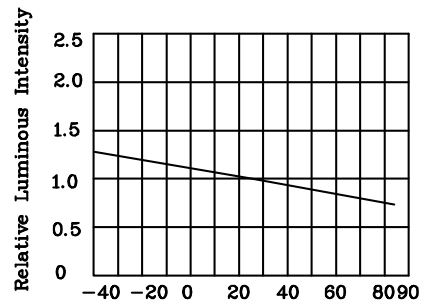
Forward Voltage(V)  
 FORWARD CURRENT Vs.  
 FORWARD VOLTAGE



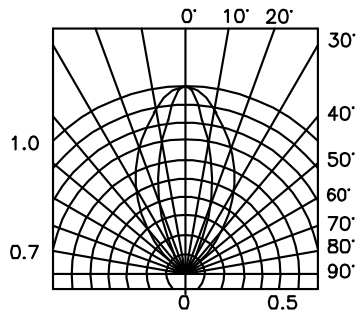
$I_F$  - Forward Current (mA)  
 LUMINOUS INTENSITY Vs.  
 FORWARD CURRENT



Ambient Temperature  $T_A$  ( $^\circ\text{C}$ )  
 FORWARD CURRENT  
 DERATING CURVE

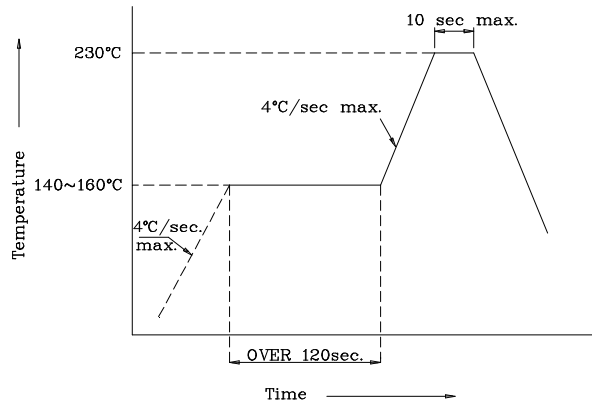


Ambient Temperature  $T_A$  ( $^\circ\text{C}$ )  
 LUMINOUS INTENSITY Vs.  
 AMBIENT TEMPERATURE

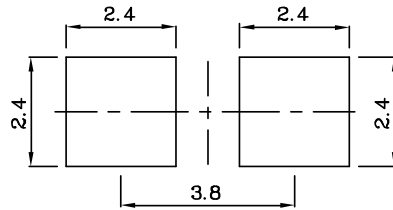


SPATIAL DISTRIBUTION

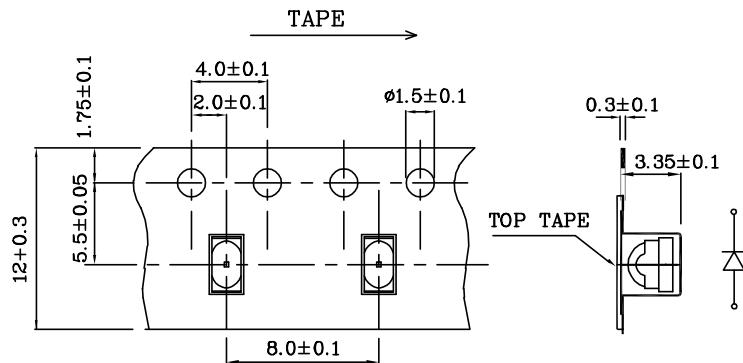
❖ SMT Reflow Soldering Instructions



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

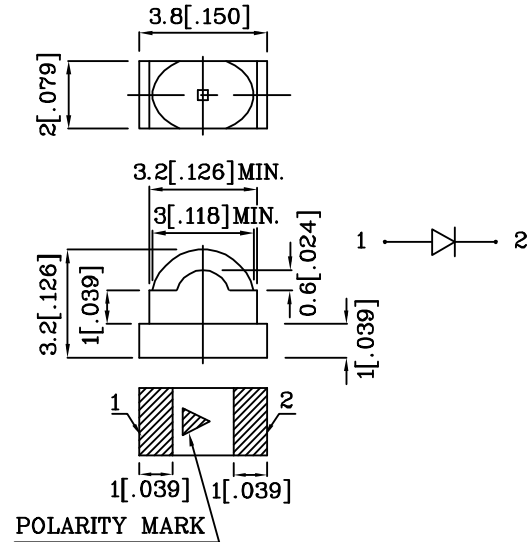


❖ Tape Specification (Units : mm)



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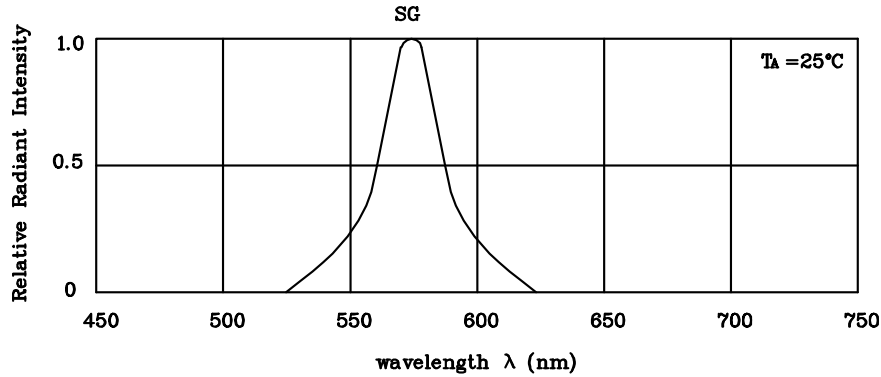
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		SG (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	

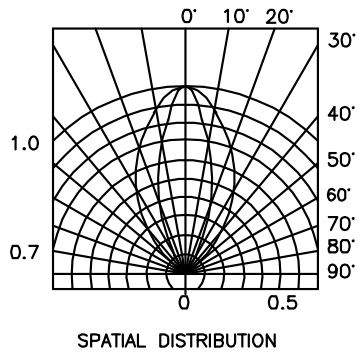
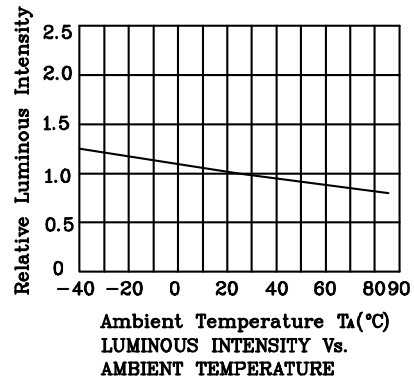
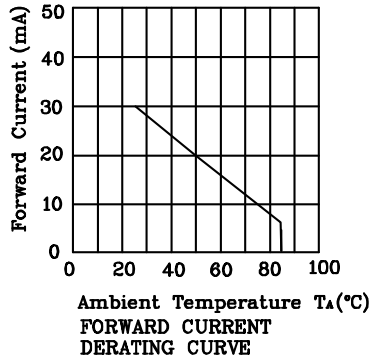
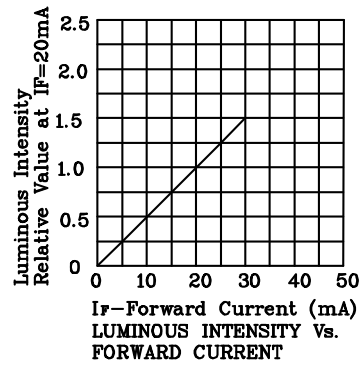
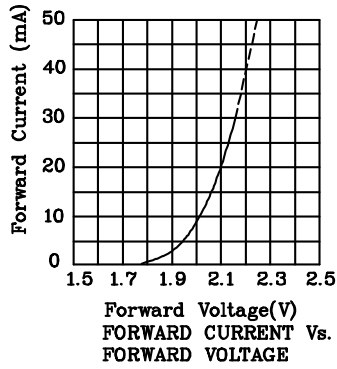
Operating Characteristics ( $T_A=25^\circ\text{C}$ )		SG (InGaAlP)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	2.1	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	2.5	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	574	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	568	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	26	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	C	20	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZSG79W	Green	InGaAlP	Water Clear	70	249	574	60° (H) 35° (V)

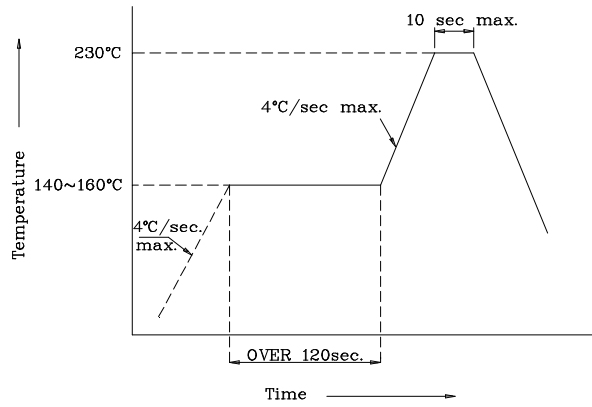


RELATIVE INTENSITY Vs. WAVELENGTH

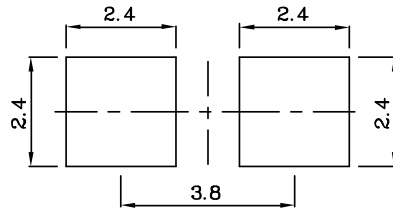
❖ SG



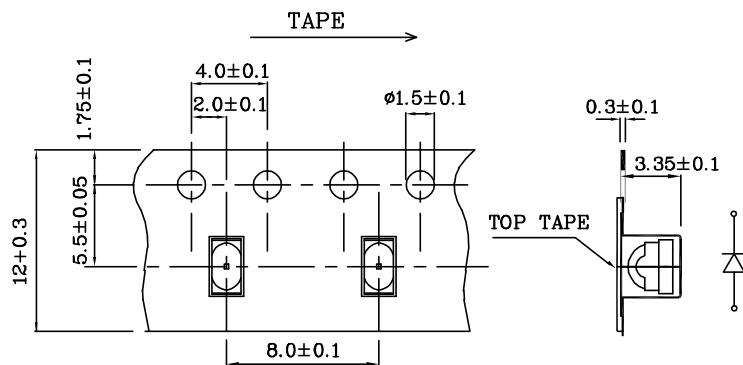
❖ SMT Reflow Soldering Instructions



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

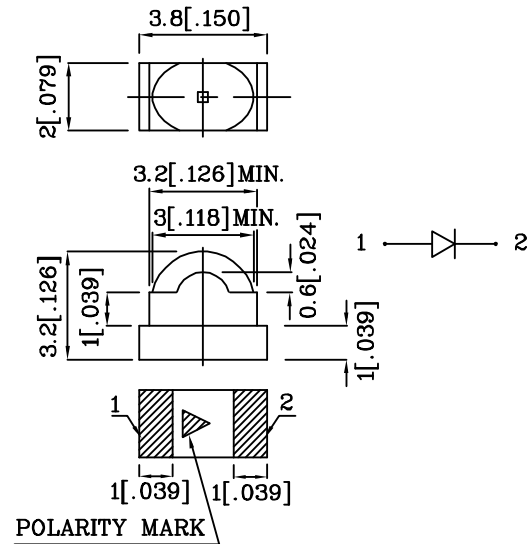


❖ Tape Specification (Units : mm)



**Features**

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Notes:

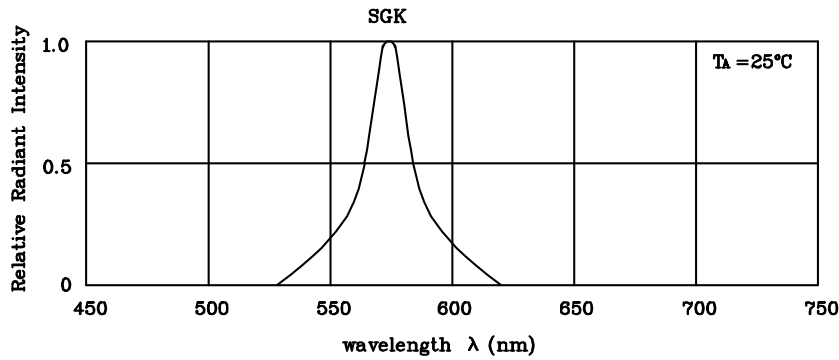
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

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	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	574	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	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

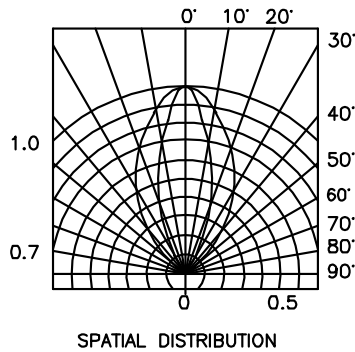
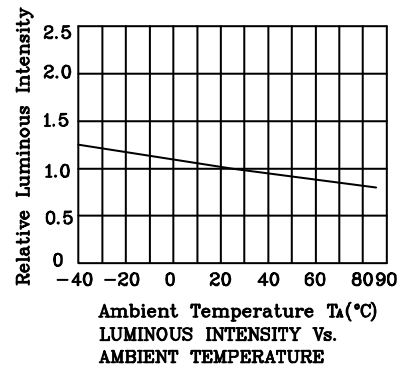
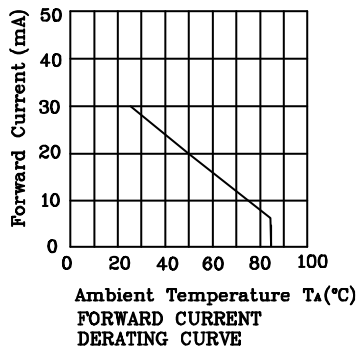
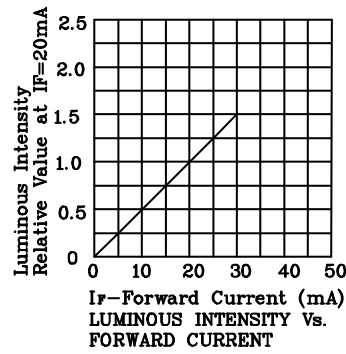
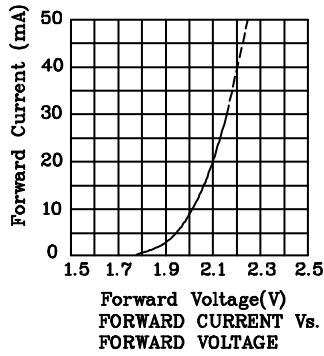
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZSGK79W	Green	InGaAlP	Water Clear	70	149	574	60° (H) 35° (V)



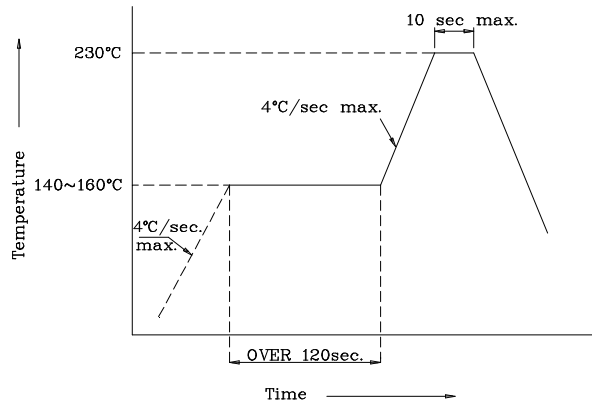


RELATIVE INTENSITY Vs. WAVELENGTH

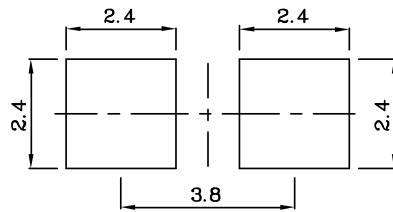
❖ SGK



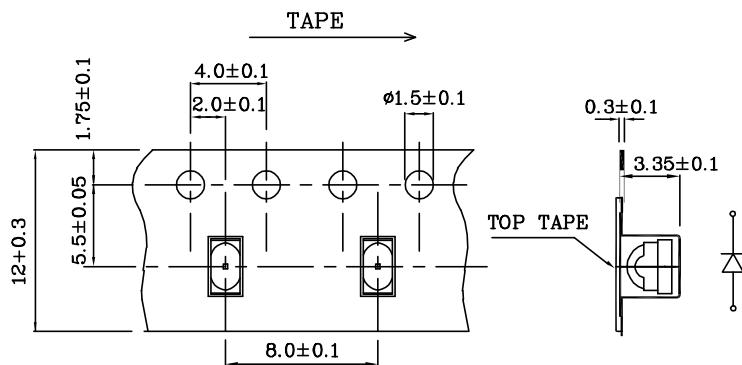
❖ SMT Reflow Soldering Instructions



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



❖ Tape Specification (Units : mm)

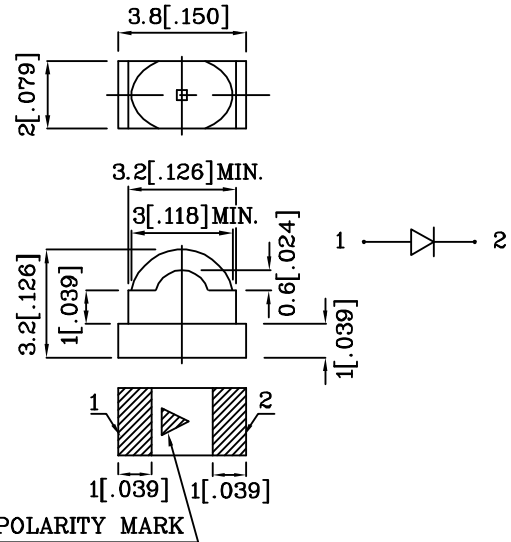


### Features

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DISCHARGE  
SENSITIVE  
DEVICES



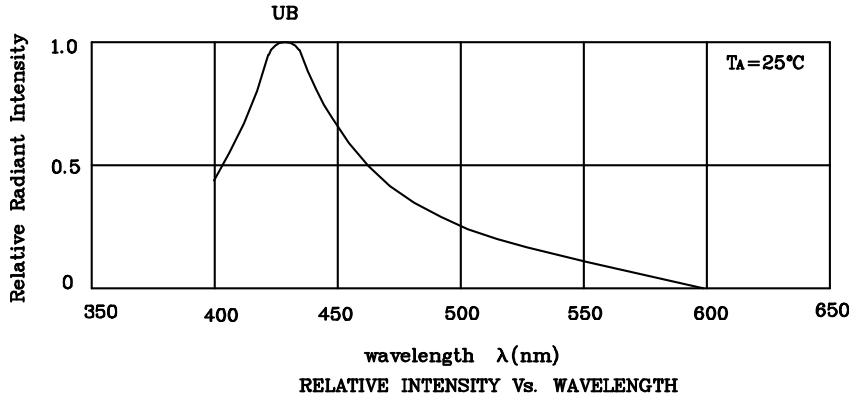
### Notes:

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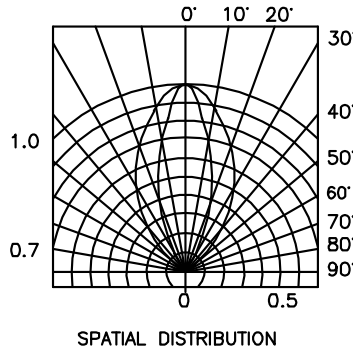
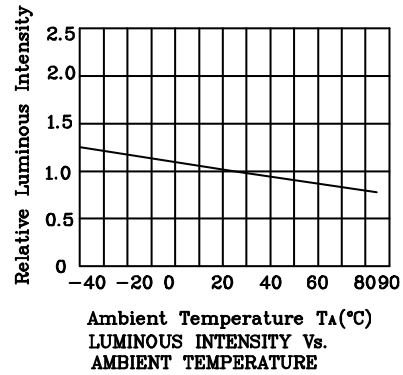
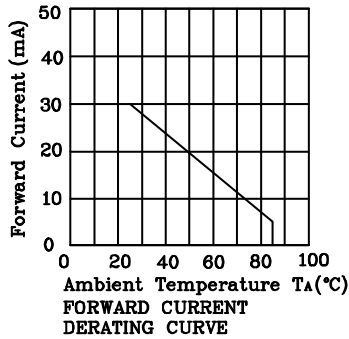
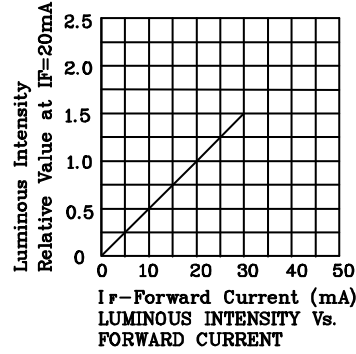
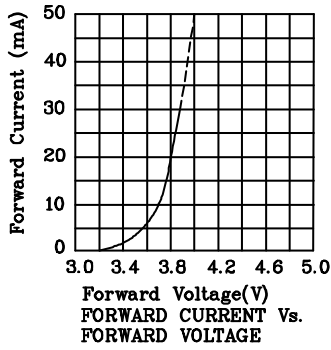
Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		UB (GaN)	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	$i_{FS}$	150	mA
Power dissipation	$P_T$	105	mW
Operating temperature	$T_A$	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40 ~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

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		UB (GaN)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	3.8	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	4.5	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	430	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	466	nm
Spectral Line half- width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	60	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	100	pF

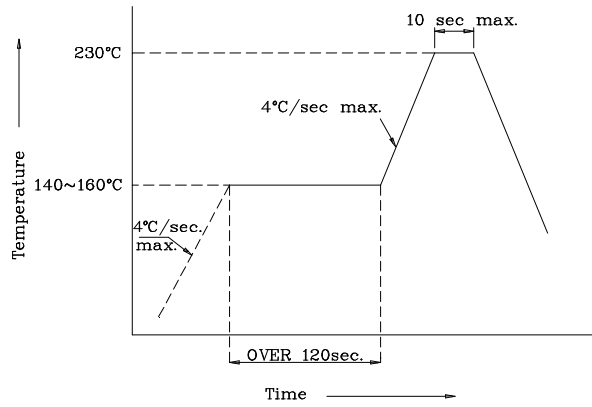
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZUB79W	Blue	GaN	Water Clear	10	24	430	60° (H) 35° (V)



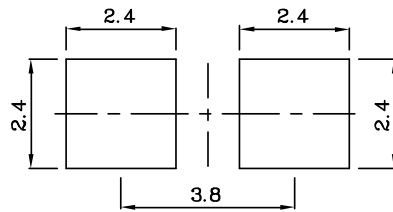
❖ UB



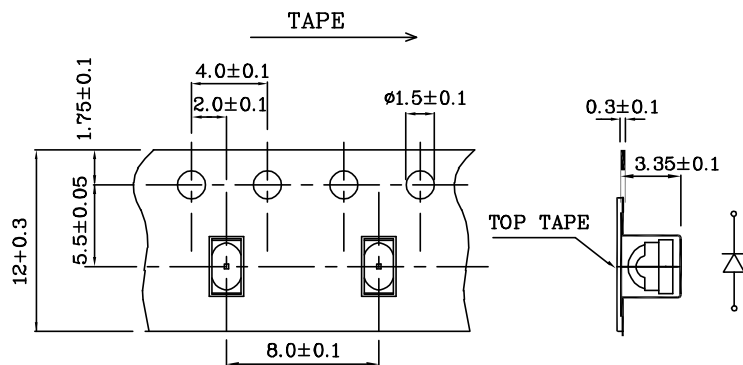
❖ SMT Reflow Soldering Instructions



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



❖ Tape Specification (Units : mm)

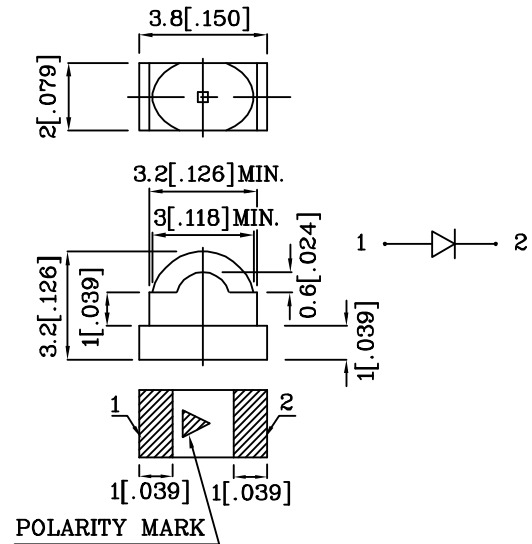


### Features

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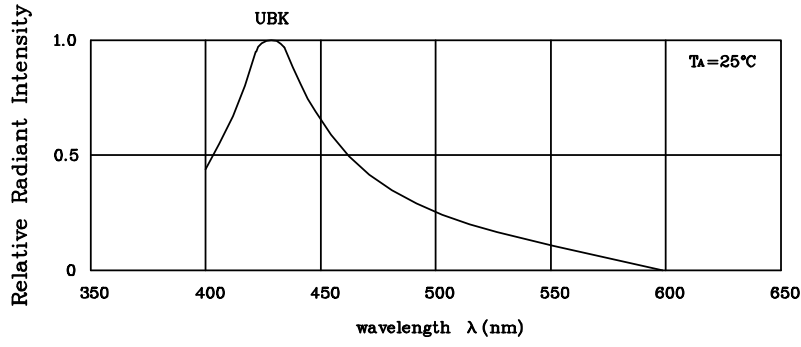
### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		UBK (GaN)	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	

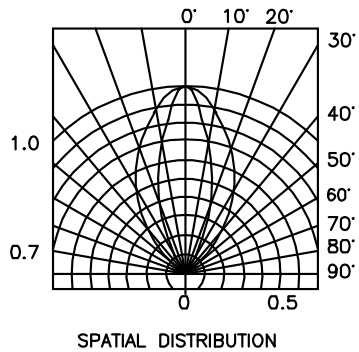
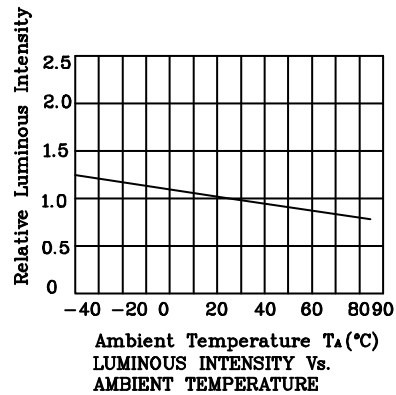
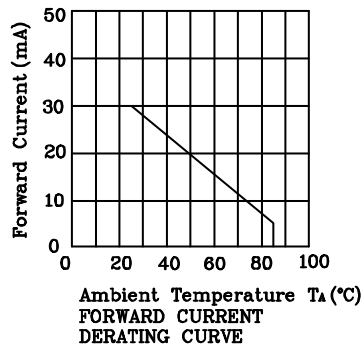
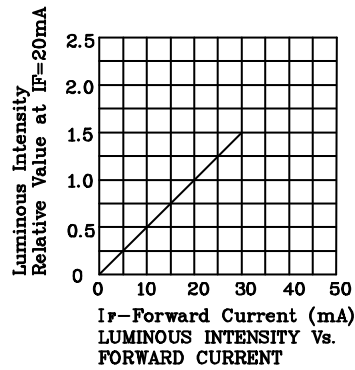
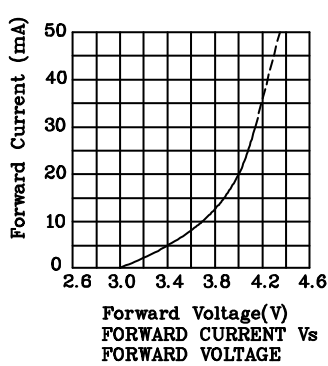
Operating Characteristics ( $T_A=25^\circ\text{C}$ )		UBK (GaN)	Unit
Forward voltage (typ.) ( $I_F=20\text{mA}$ )	$V_F$	4.0	V
Forward voltage (max.) ( $I_F=20\text{mA}$ )	$V_F$	5.2	V
Reverse current ( $V_R=5\text{V}$ )	$I_R$	10	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	430	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	466	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	60	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	100	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZUBK79W	Blue	GaN	Water Clear	7	17	430	60° (H) 35° (V)

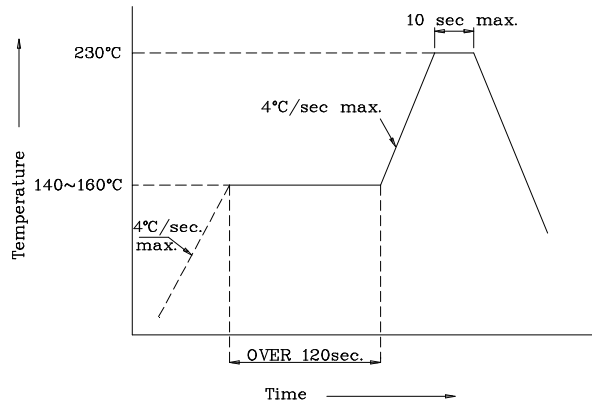


RELATIVE INTENSITY Vs. WAVELENGTH

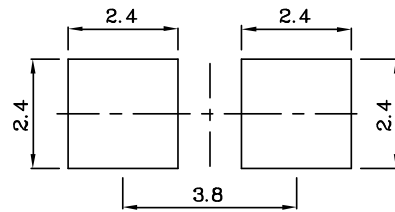
❖ UBK



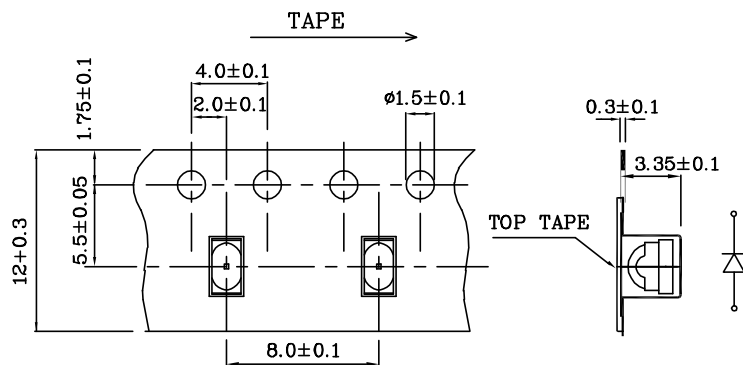
❖ SMT Reflow Soldering Instructions



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



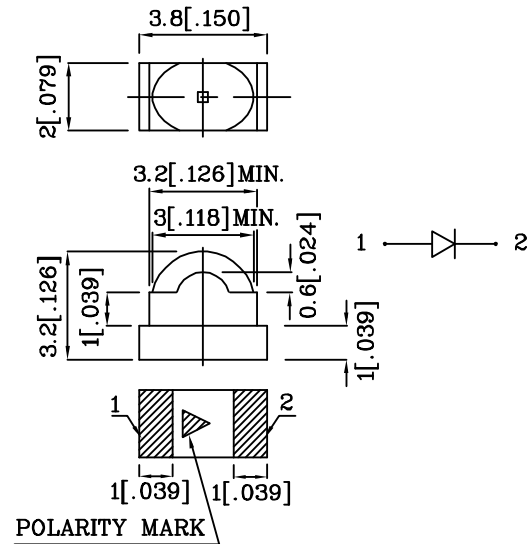
❖ Tape Specification (Units : mm)





**Features**

- 3.8mmx2.0mm SMT LED,3.2mm THICKNESS.
- LOW POWER CONSUMPTION.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 500PCS / REEL.



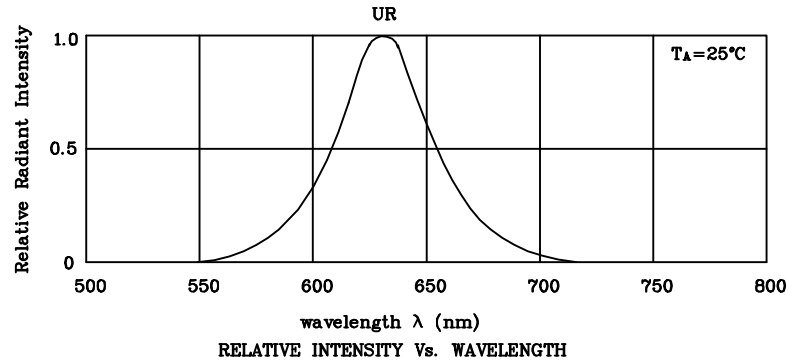
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

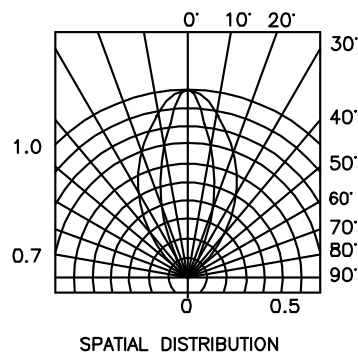
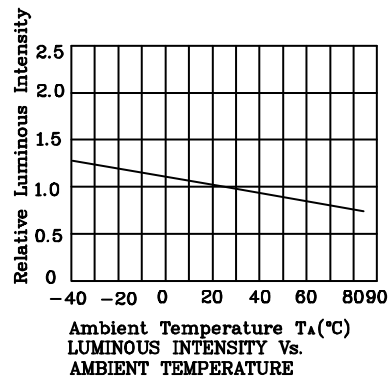
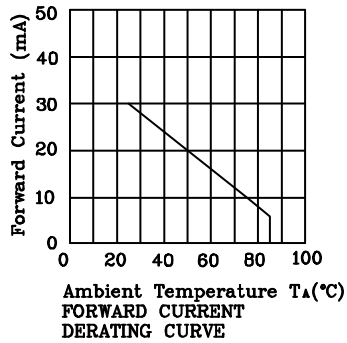
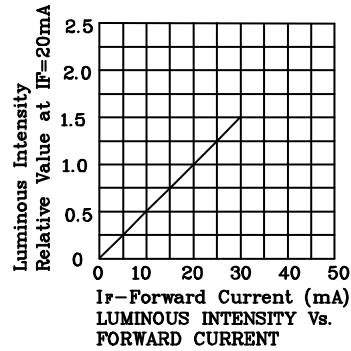
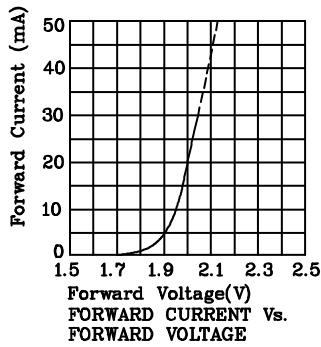
Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		UR (GaAsP/GaP)	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	$i_{FS}$	160	mA
Power dissipation	$P_T$	105	mW
Operating temperature	$T_A$	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40 ~ +85	

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		UR (GaAsP/ GaP)	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	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	627	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	625	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	45	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	15	pF

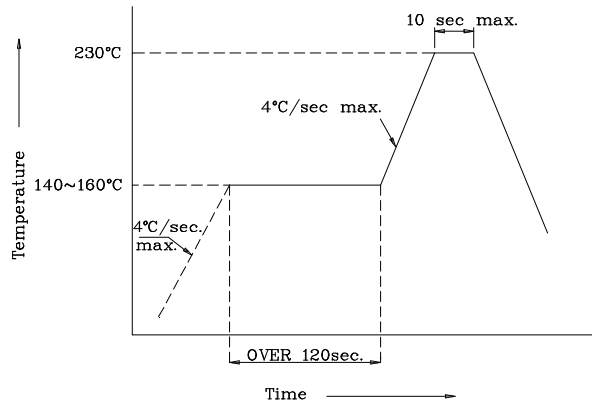
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZUR79W	Red	GaAsP/GaP	Water Clear	18	39	627	60° (H) 35° (V)



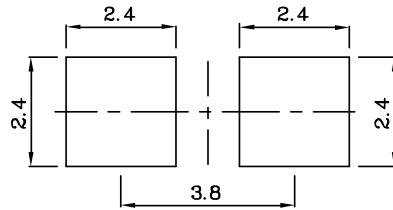
❖ UR



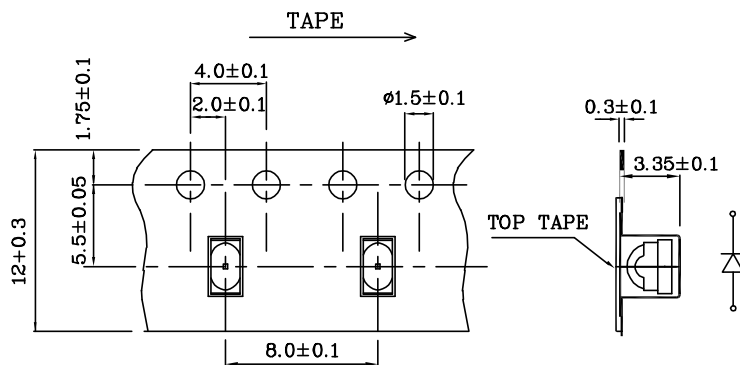
❖ SMT Reflow Soldering Instructions



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

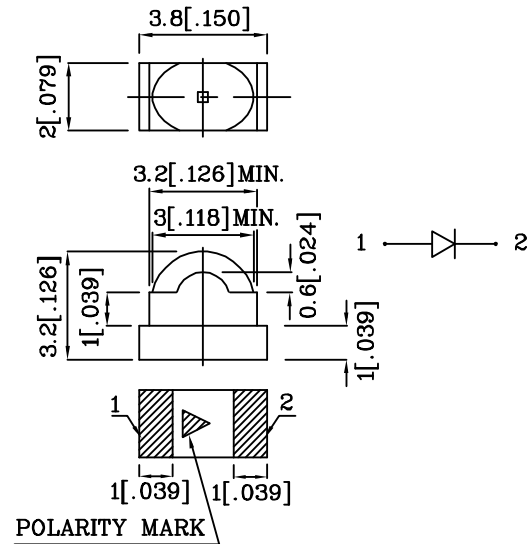


❖ Tape Specification (Units : mm)



### Features

- 3.8mmx2.0mm SMT LED,3.2mm THICKNESS.
- LOW POWER CONSUMPTION.
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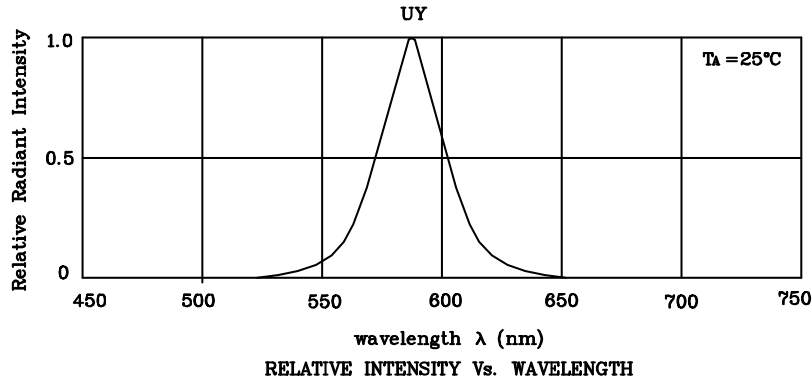
### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.008)$  unless otherwise noted.

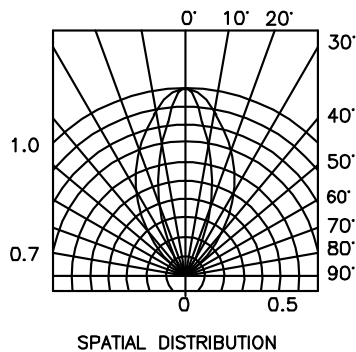
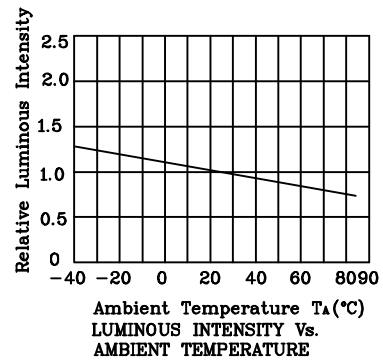
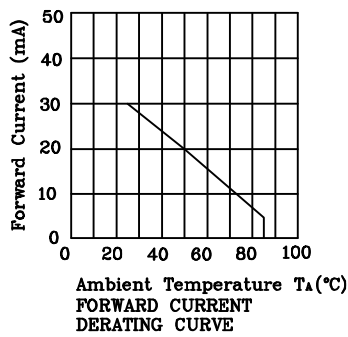
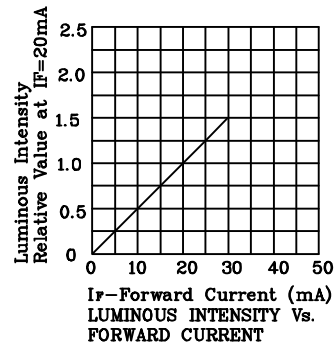
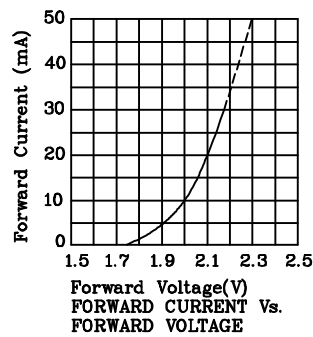
Absolute maximum ratings ( $T_A=25^\circ\text{C}$ )		UY (GaAsP/GaP)	Unit
Reverse voltage	$V_R$	5	V
Forward current	$I_F$	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	$i_{FS}$	140	mA
Power dissipation	$P_T$	105	mW
Operating temperature	$T_A$	-40 ~ +85	°C
Storage temperature	$T_{stg}$	-40 ~ +85	

Operating Characteristics ( $T_A=25^\circ\text{C}$ )		UY (GaAsP/ GaP)	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	$\mu\text{A}$
Wavelength at peak emission ( $I_F=20\text{mA}$ )	$\lambda_{\text{peak}}$	590	nm
Wavelength at Dominate emission ( $I_F=20\text{mA}$ )	$\lambda_D$	588	nm
Spectral Line half-width ( $I_F=20\text{mA}$ )	$\Delta\lambda$	35	nm
Capacitance ( $V_F=0\text{V}$ , $f=1\text{MHz}$ )	$C$	20	pF

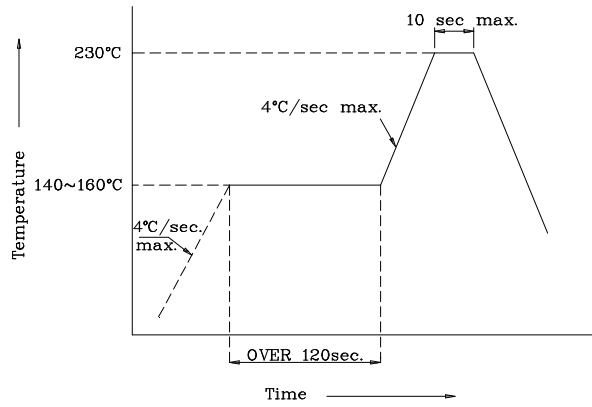
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity ( $I_F=20\text{mA}$ ) mcd		Wavelength nm $\lambda_P$	Viewing Angle $2\theta_{1/2}$
				min.	typ.		
XZUY79W	Yellow	GaAsP/GaP	Water Clear	7	19	590	60° (H) 35° (V)



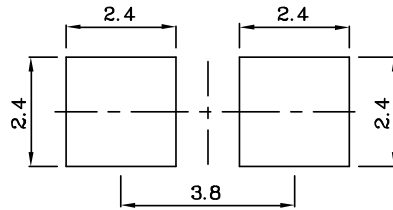
❖ UY



❖ SMT Reflow Soldering Instructions



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



❖ Tape Specification (Units : mm)

