

**Features**

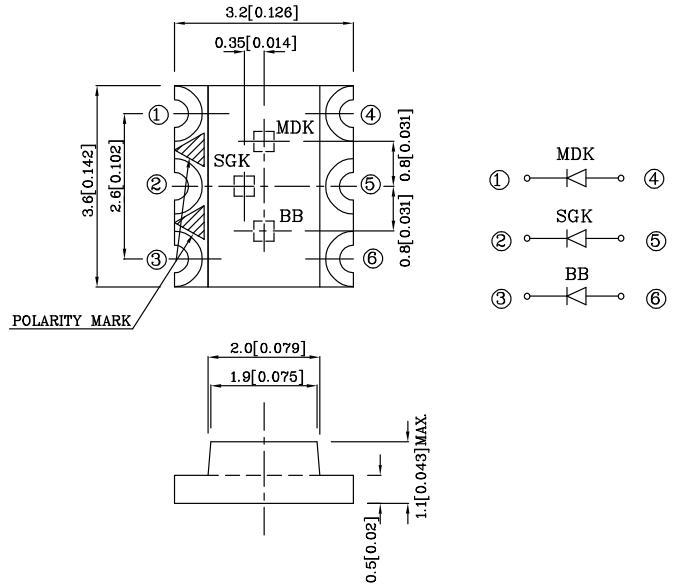
- LOW POWER CONSUMPTION.
- 3.2mmx3.6mm SMT LED, 1.1mm THICKNESS.
- CAN PRODUCE ANY COLOR IN VISIBLE SPECTRUM, INCLUDING WHITE LIGHT.
- PACKAGE : 1000PCS / REEL.



**ATTENTION**  
 OBSERVE PRECAUTIONS  
 FOR HANDLING  
 ELECTROSTATIC  
 DISCHARGE  
 SENSITIVE  
 DEVICES

Notes:

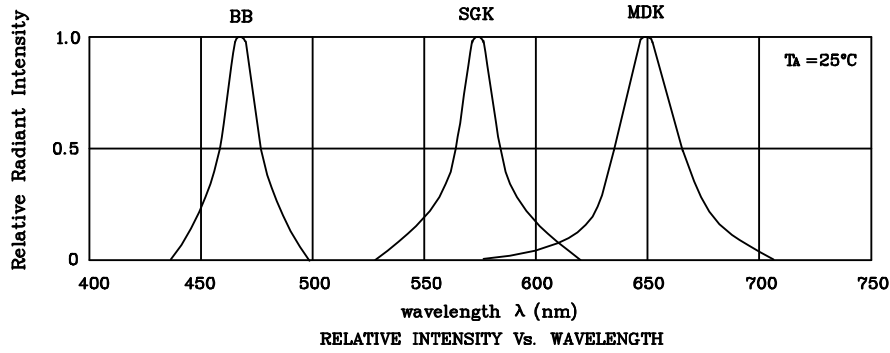
1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.2(0.0079")$  unless otherwise noted.



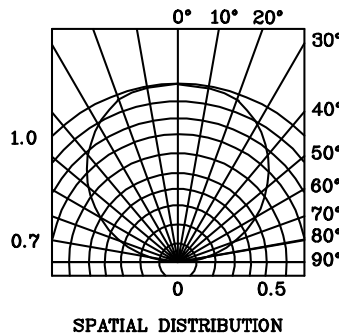
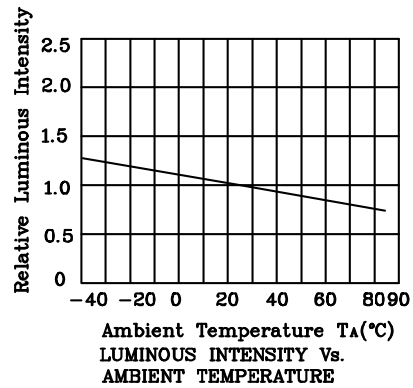
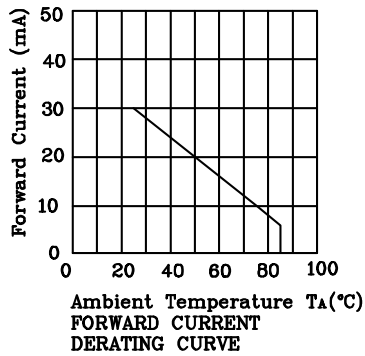
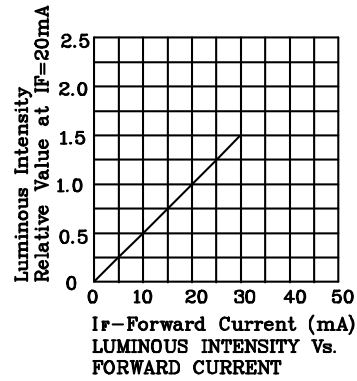
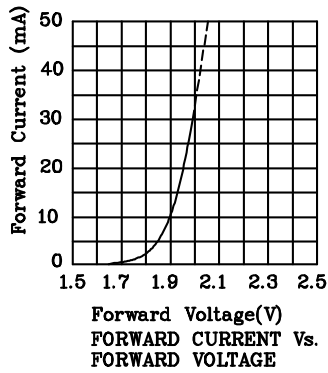
Absolute maximum ratings (TA=25°C)		MDK (InGaAlP)	SGK (InGaAlP)	BB (InGaN)	Unit
Reverse voltage	VR	5	5	5	V
Forward current	IF	30	30	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	iFS	185	150	160	mA
Power dissipation	PT	170	105	102	mW
Operating temperature	TA	-40 ~ +85			°C
Storage temperature	Tstg	-40 ~ +85			

Operating Characteristics (TA=25°C)		MDK (InGaAlP)	SGK (InGaAlP)	BB (InGaN)	Unit
Forward voltage (typ.) (IF=20mA)	VF	1.95	2.1	3.65	V
Forward voltage (max.) (IF=20mA)	VF	2.5	2.5	4.2	V
Reverse current (VR=5V)	IR	10	10	10	uA
Wavelength at peak emission (IF=20mA)	$\lambda$ peak	650	574	468	nm
Wavelength at Dominate emission (IF=20mA)	$\lambda$ D	635	570	470	nm
Spectral Line half-width (IF=20mA)	$\Delta\lambda$	28	20	25	nm
Capacitance (VF=0V, f=1MHz)	C	35	15	65	pF

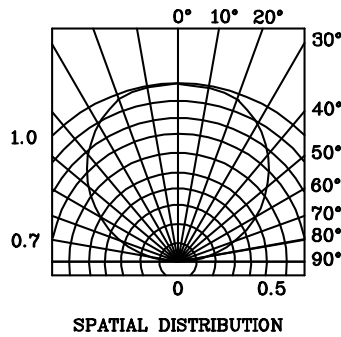
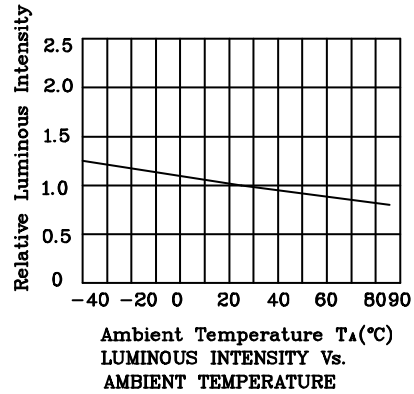
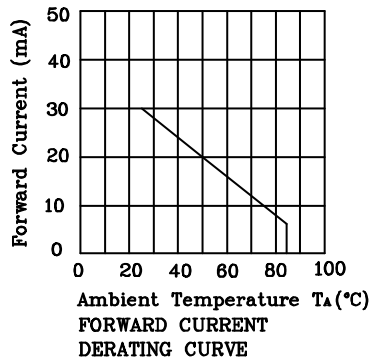
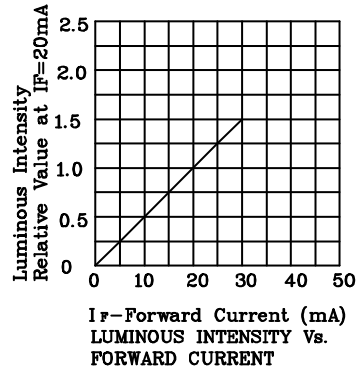
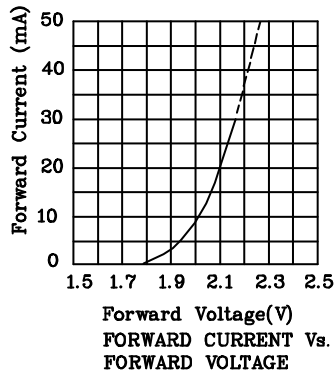
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm $\lambda$ P	Viewing Angle 2 $\theta$ 1/2
				min.	typ.		
XZMDKSGKBB61W	Red	InGaAlP	Water Clear	70	148	650	120°
	Green	InGaAlP		18	58	574	
	Blue	InGaN		18	58	468	



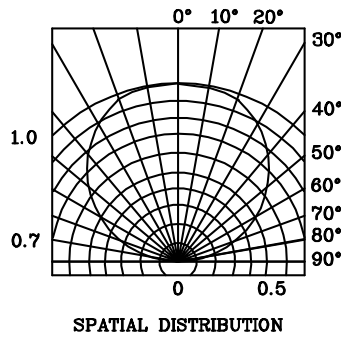
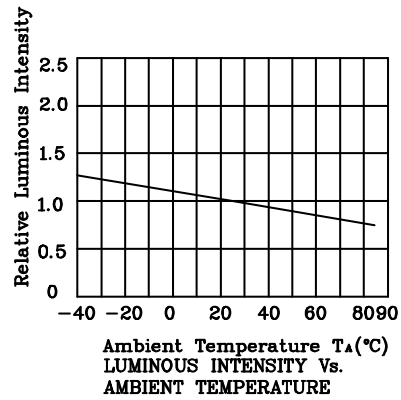
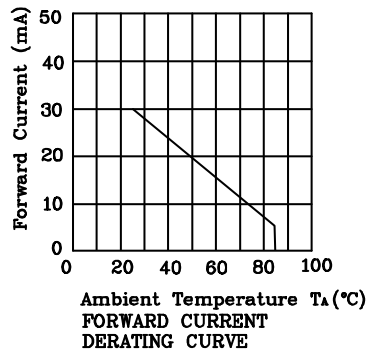
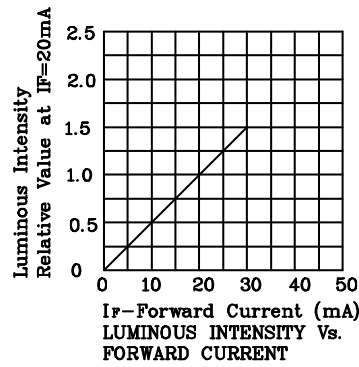
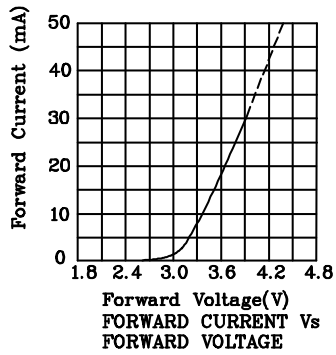
❖ MDK



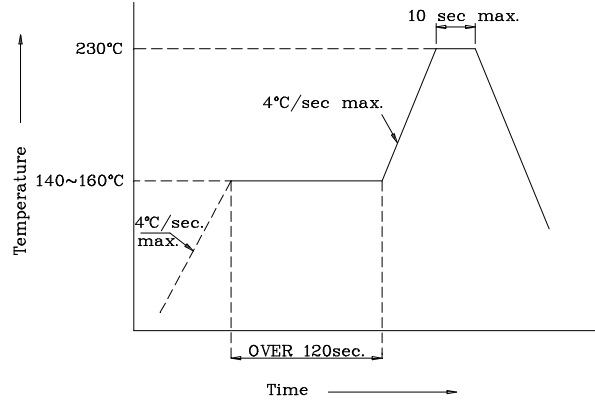
❖ SGK



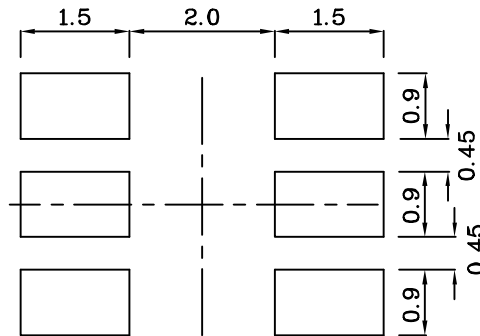
❖ BB



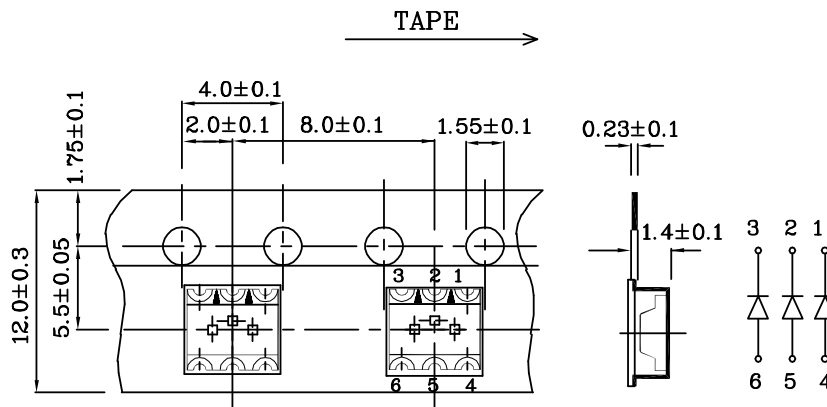
❖ SMT Reflow Soldering Instructions



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



❖ Tape Specification (Units : mm)



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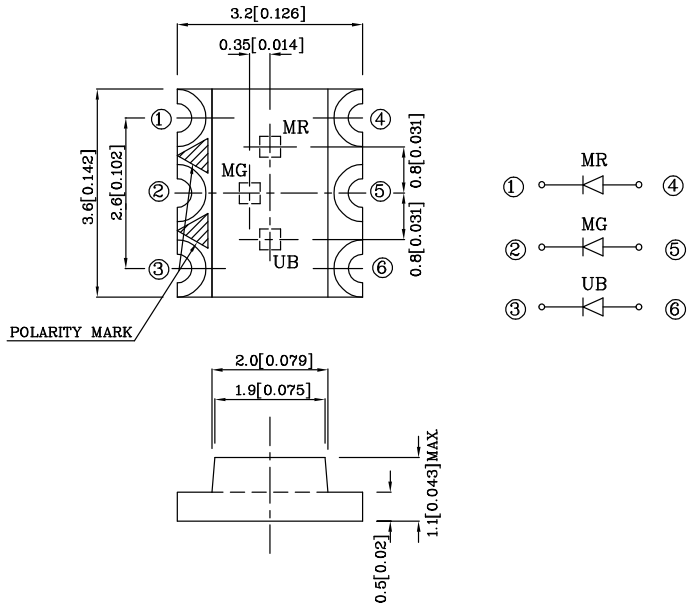
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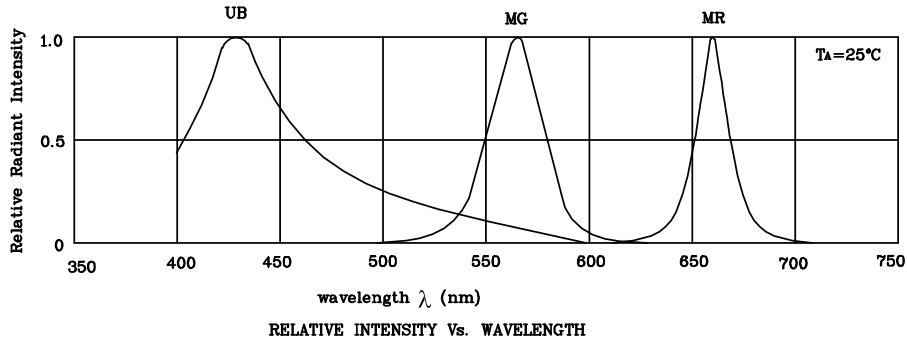
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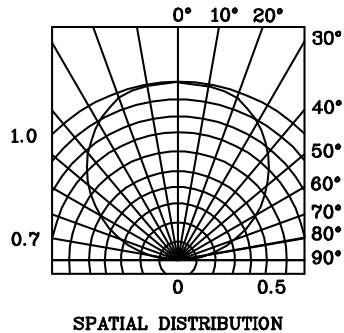
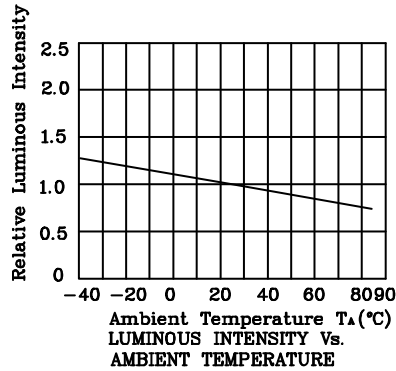
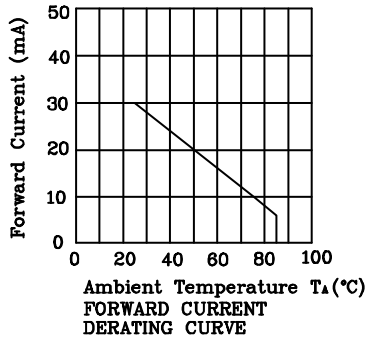
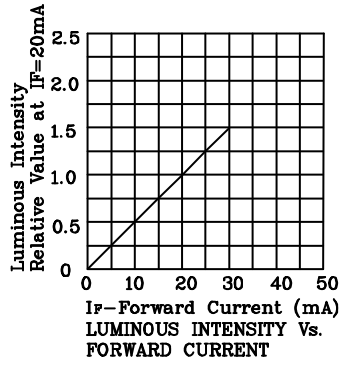
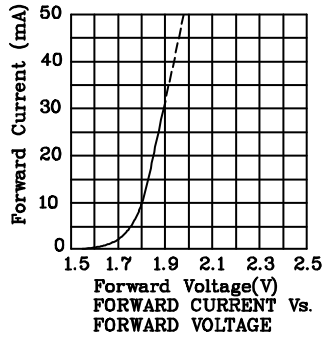
Absolute maximum ratings (TA=25°C)		MR (GaAlAs)	MG (GaP)	UB (GaN)	Unit
Reverse voltage	VR	5	5	5	V
Forward current	IF	30	25	30	mA
Forward current (peak) 1/10Duty cycle 0.1ms pulse width	iFS	155	140	150	mA
Power dissipation	PT	100	105	105	mW
Operating temperature	TA	-40 ~ +85			°C
Storage temperature	Tstg	-40 ~ +85			

Operating Characteristics (TA=25°C)		MR (GaAlAs)	MG (GaP)	UB (GaN)	Unit
Forward voltage (typ.) (IF=20mA)	VF	1.85	2.2	3.8	V
Forward voltage (max.) (IF=20mA)	VF	2.5	2.5	4.5	V
Reverse current (VR=5V)	IR	10	10	10	uA
Wavelength at peak emission (IF=20mA)	$\lambda$ peak	660	565	430	nm
Wavelength at Dominate emission (IF=20mA)	$\lambda$ D	640	568	466	nm
Spectral Line half-width (IF=20mA)	$\Delta\lambda$	20	30	60	nm
Capacitance (VF=0V, f=1MHz)	C	45	15	100	pF

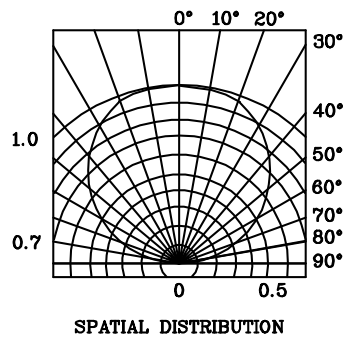
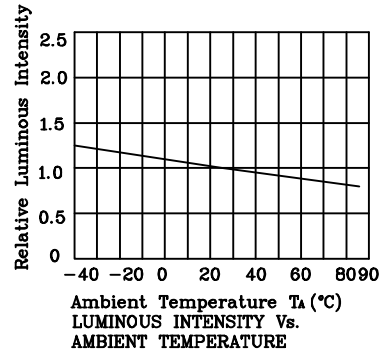
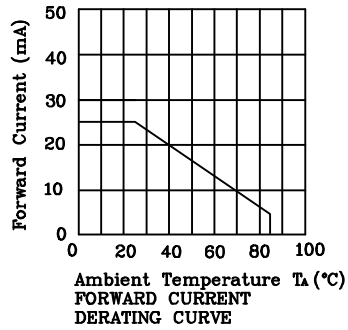
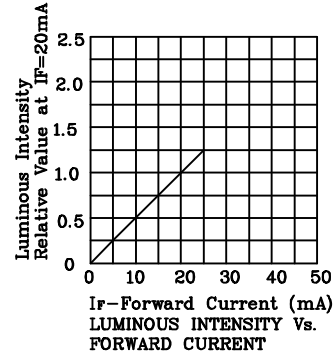
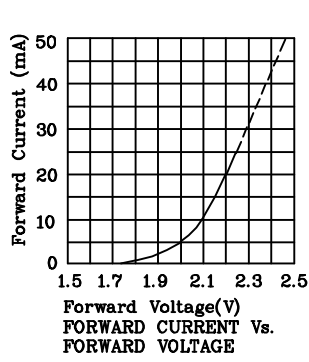
Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm $\lambda$ P	Viewing Angle $2\theta$ 1/2
				min.	typ.		
XZMRMGUB61WA	Red	GaAlAs	Water Clear	36	68	660	120°
	Green	GaP		2.6	11	565	
	Blue	Ga N		1.6	7	430	



❖ MR

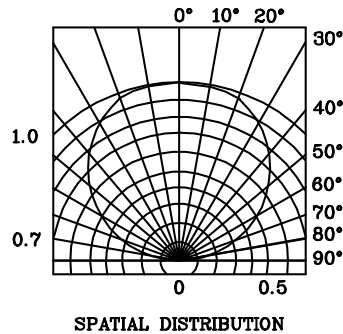
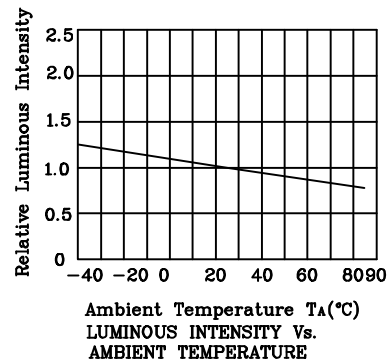
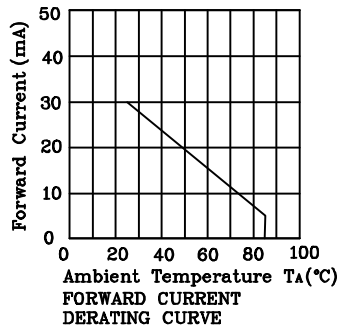
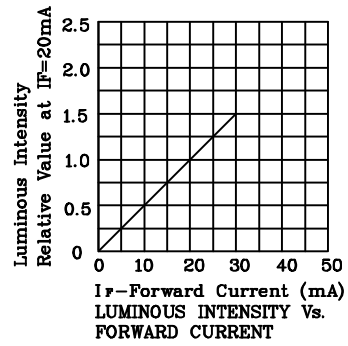
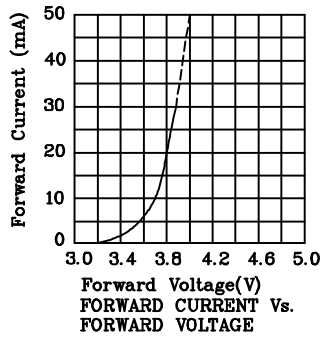


❖ MG

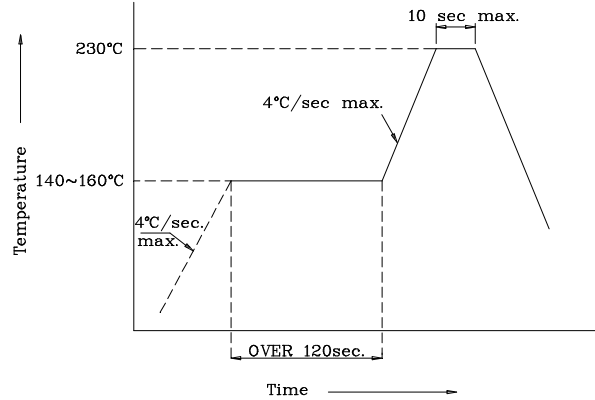




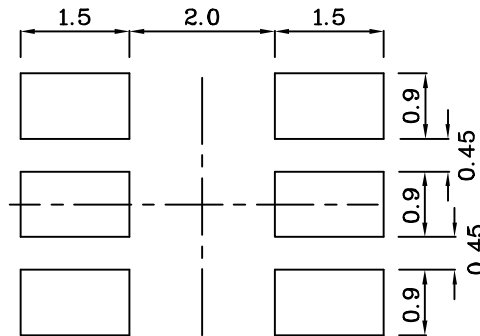
❖ UB



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



❖ Tape Specification (Units : mm)

