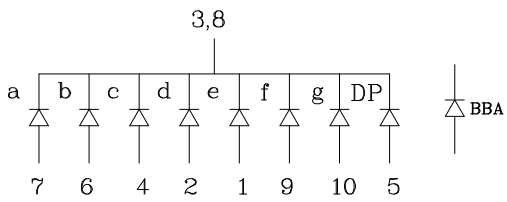
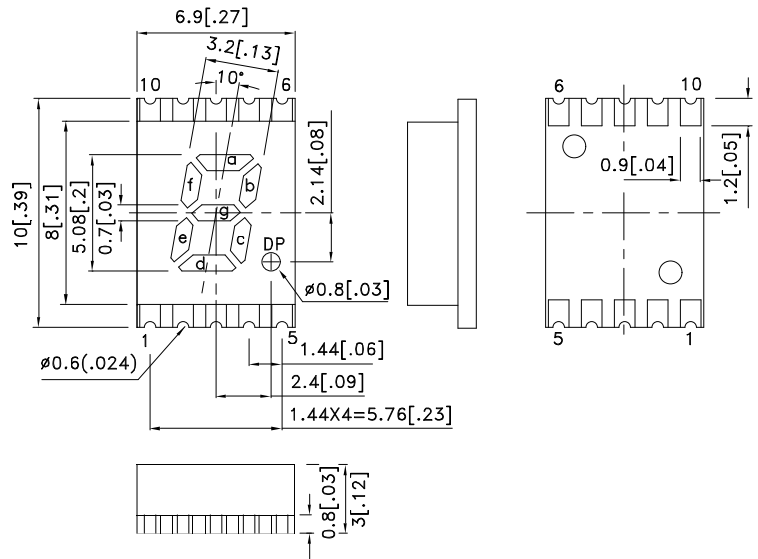


PRELIMINARY SPEC

**Features**

- 0.21 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE, WHITE SEGMENT.
- PACKAGE : 650 PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



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

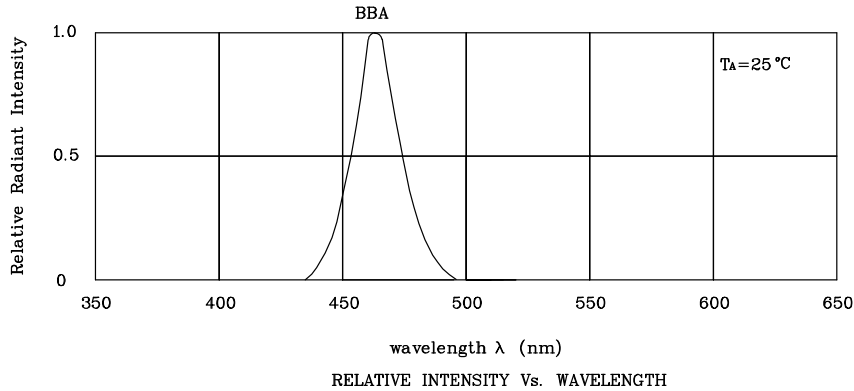
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
3. The gap between the reflector and PCB shall not exceed 0.25mm.
4. Specifications are subject to change without notice.

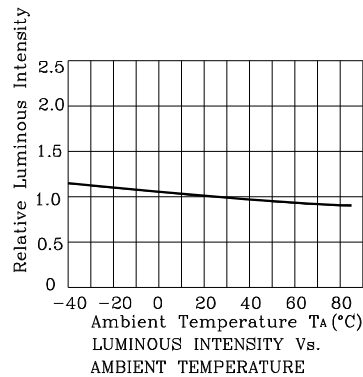
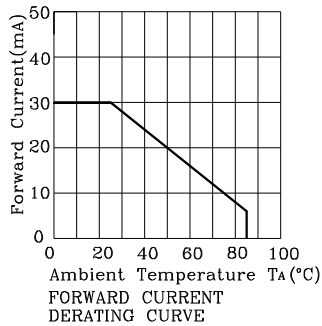
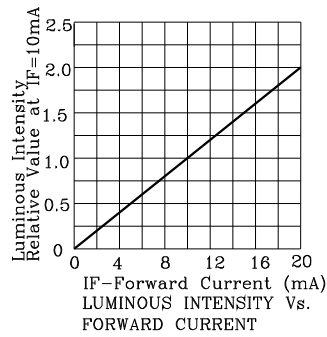
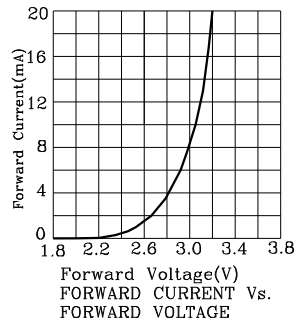
Absolute Maximum Ratings (TA=25°C)		BBA (InGaN)	Unit
Reverse Voltage	VR	5	V
Forward Current	IF	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	100	mA
Power Dissipation	PT	120	mW
Operating Temperature	TA	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Electrostatic Discharge Threshold (HBM)		1000	V

Operating Characteristics (TA=25°C)		BBA (InGaN)	Unit
Forward Voltage (Typ.) (IF=10mA)	VF	3.05	V
Forward Voltage (Max.) (IF=10mA)	VF	4.0	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength Of Peak Emission (Typ.) (IF=10mA)	$\lambda P$	468	nm
Wavelength Of Dominant Emission (Typ.) (IF=10mA)	$\lambda D$	470	nm
Spectral Line Full Width At Half-Maximum (Typ.) (IF=10mA)	$\Delta\lambda$	21	nm
Capacitance (VF=0V, f=1MHz)	C	100	pF

Part Number	Emitting Color	Emitting Material	Luminous Intensity (IF=10mA)		Wavelength nm $\lambda P$	Description
			min.	typ.		
ZFBBA05C	Blue	InGaN	1200	4990	468	Common Cathode. Rt. Hand Decimal



❖ **BBA**



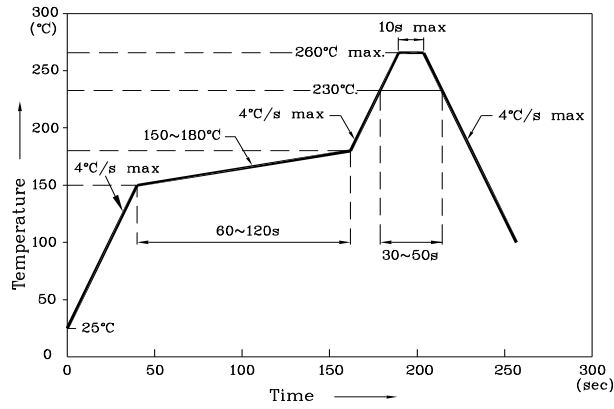
Remarks:

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

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

Note: Accuracy may depend on the sorting parameters.

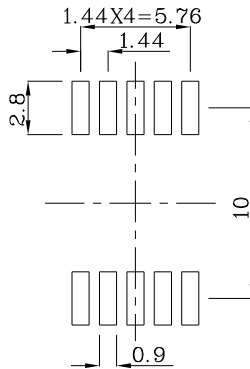
Reflow Soldering Profile For Lead-free SMT Process.



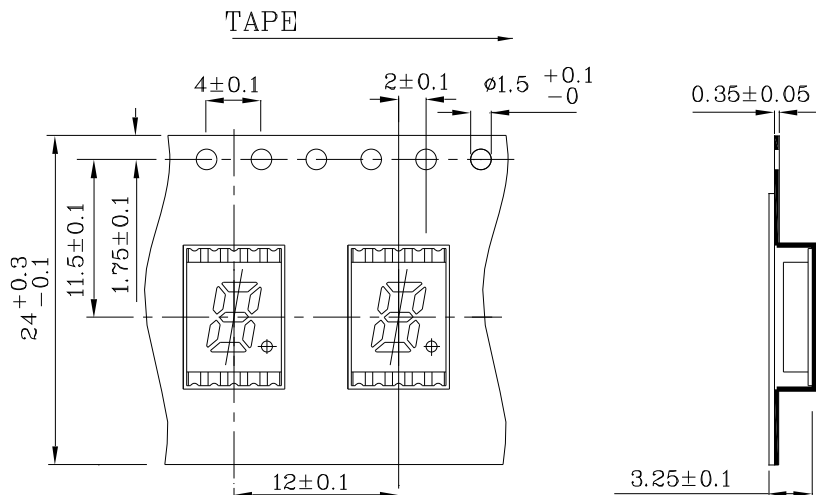
Notes:

1. Maximum soldering temperature should not exceed 260°C.
2. Recommended reflow temperature: 145°C-260°C.
3. Do not put stress to the epoxy resin during high temperatures conditions.

❖ Recommended Soldering Pattern (Units : mm;Tolerance: ± 0.15)



❖ Tape Specification (Units : mm)



**PACKING & LABEL SPECIFICATIONS**

**ZFBBA05C**

