SunLED
www.SunLED.com

Part Number: **ZFBBA14C**

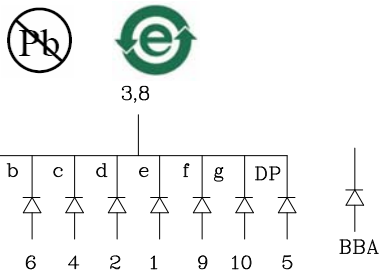
SURFACE MOUNT DISPLAY

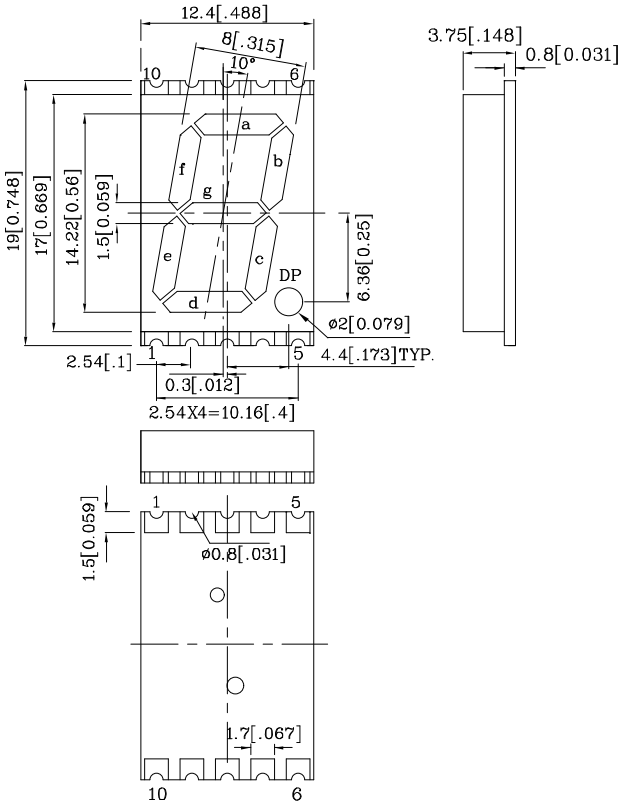
Features

- 0.56 INCH DIGIT HEIGHT.
- LOW CURRENT OPERATION.
- EXCELLENT CHARACTER APPEARANCE.
- I.C. COMPATIBLE.
- MECHANICALLY RUGGED.
- GRAY FACE,WHITE SEGMENT.
- PACKAGE : 400PCS / REEL.
- MOISTURE SENSITIVITY LEVEL : LEVEL 4.
- RoHS COMPLIANT.



ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES





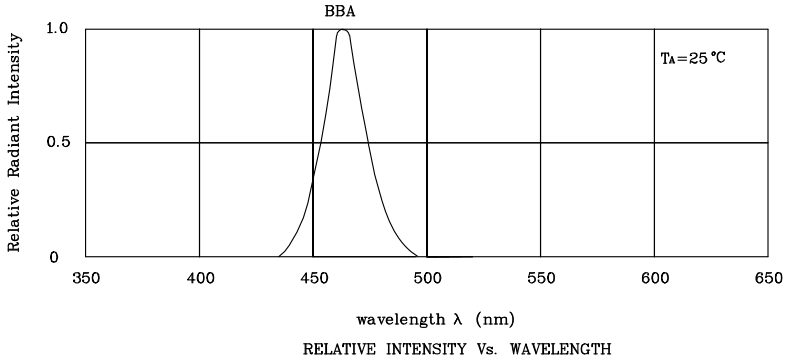
Notes:

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

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

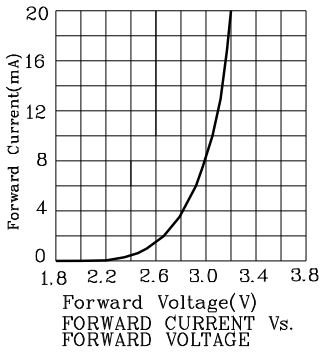
Operating Characteristics (TA=25°C)		**BBA (InGaN)**	**Unit**
Forward Voltage (Typ.) (IF=10mA)	VF	3.05	V
Forward Voltage (Max.) (IF=10mA)	VF	4.0	V
Reverse Current (Max.) (VR=5V)	IR	10	uA
Wavelength of Peak Emission (Typ.) (IF=10mA)	λ P	468	nm
Wavelength of Dominant Emission (Typ.) (IF=10mA)	λ D	470	nm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

Part Number	Emitting Color	Emitting Material	Luminous Intensity (IF=10mA) ucd		Wavelength nm λ P	Description
			min.	typ.		
ZFBBA14C	Blue	InGaN	1900	8990	468	Common Cathode. Rt. Hand Decimal

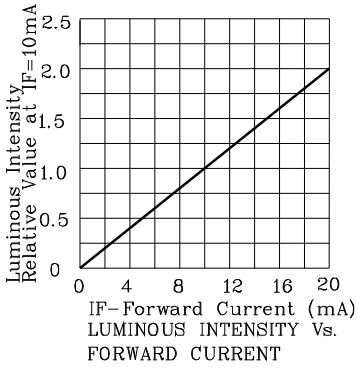


RELATIVE INTENSITY Vs. WAVELENGTH

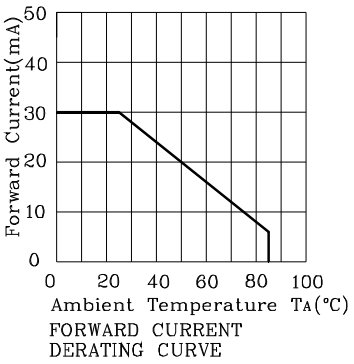
❖ BBA



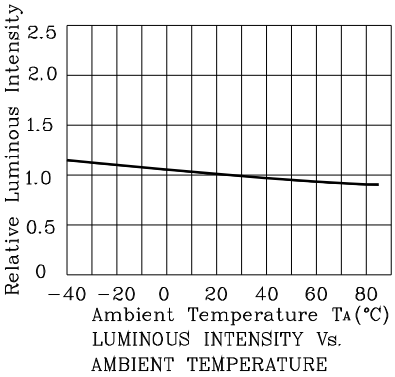
FORWARD CURRENT Vs.
FORWARD VOLTAGE



LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

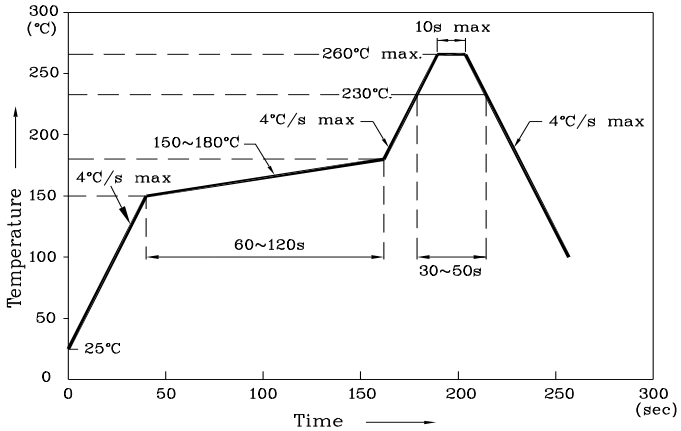
Remarks:

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

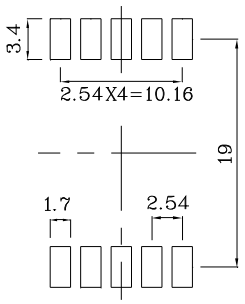
Note: Accuracy may depend on the sorting parameters.

Reflow Soldering Profile For Lead-free SMT Process.

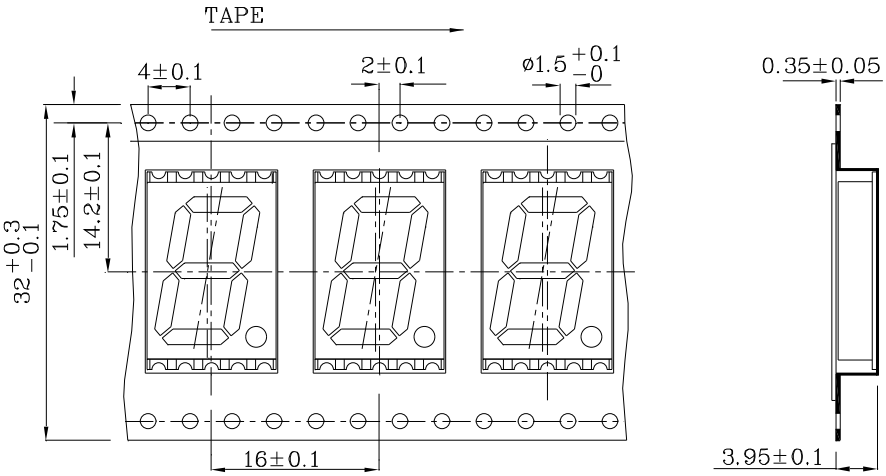


Notes:
1. Maximum soldering temperature should not exceed 260℃.
2. Recommended reflow temperature: 145℃-260℃.
3. Do not put stress to the epoxy resin during high temperatures conditions.

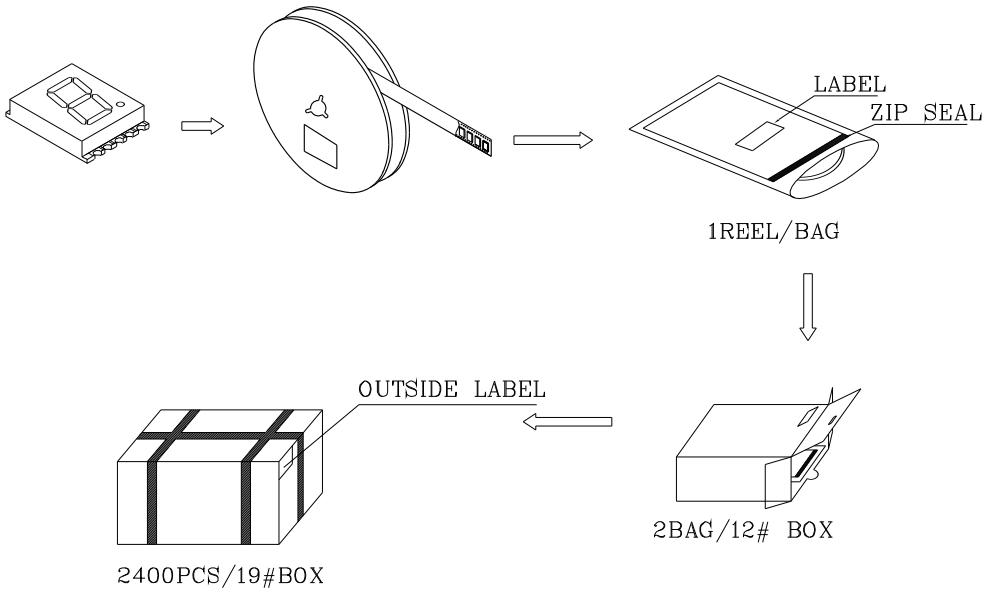
❖ Recommended Soldering Pattern (Units : mm;Tolerance:± 0.15)



❖ Tape Specification (Units : mm)

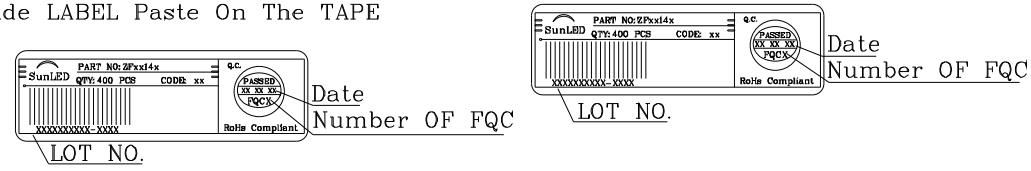


PACKING & LABEL SPECIFICATIONS ZFBBA14C



Outside LABEL Paste On The BAG

Inside LABEL Paste On The TAPE



Outside LABEL Paste On The 19#Box

Outside LABEL Paste On The 12#Box

