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Stocking Distributor

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[Kingbright](#)
[APA3010F3C-GX](#)

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3.0mmx1.0mm RIGHT ANGLE INFRARED EMITTING DIODE

Part Number: APA3010F3C-GX

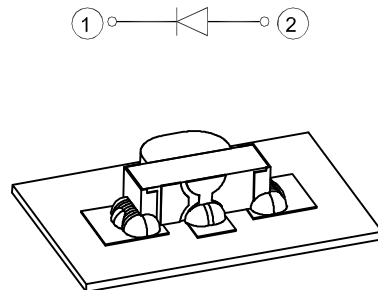
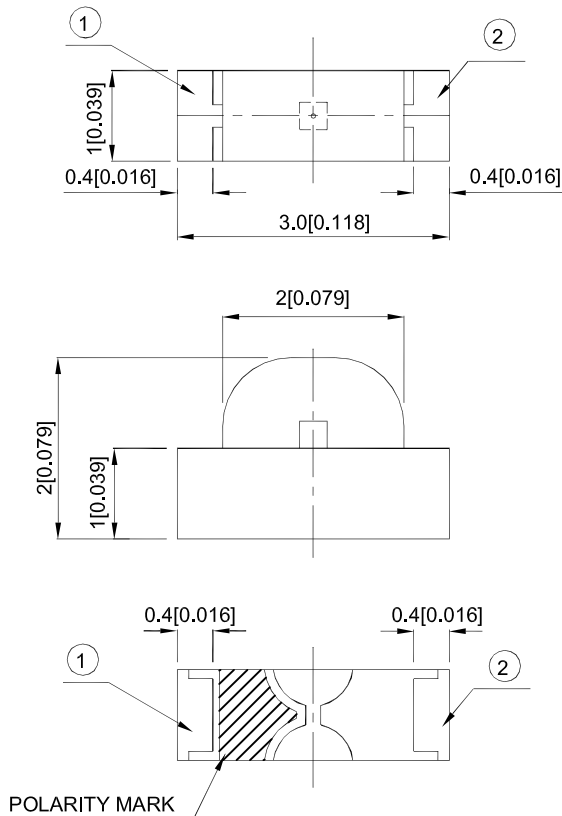
Features

- 3.0mmx2.0mmx1.0mm right angle SMD LED, 1.0mm thickness.
- Mechanically and spectrally matched to phototransistor.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- Tinned pads for improved solderability.
- RoHS compliant.

Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.15(0.006)$ unless otherwise noted.
3. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



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Selection Guide

Part No.	Emitting Color (Material)	Lens Type	Po (mW/sr) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APA3010F3C-GX	Infrared (GaAs)	Water Clear	1.2	3	120°
			*0.8	*2	

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
 2. Radiant Intensity / luminous flux: +/-15%.
- * Radiant intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Parameter	P/N	Symbol	Typ.	Max.	Units	Test Conditions
Forward Voltage [1]	F3	V _F	1.2	1.6	V	I _F =20mA
Reverse Current	F3	I _R		10	uA	V _R = 5V
Capacitance	F3	C	90		pF	V _F =0V;f=1MHz
Peak Spectral Wavelength	F3	λ _P	940		nm	I _F =20mA
Spectral Bandwidth	F3	Δλ1/2	50		nm	I _F =20mA

Note:

- 1.Forward Voltage: +/-0.1V.
- 2.Wavelength value is traceable to the CIE127-2007 compliant national standards.
- 3.Excess driving current and/or operating temperature higher than recommended conditions may result in severe light degradation or premature failure.

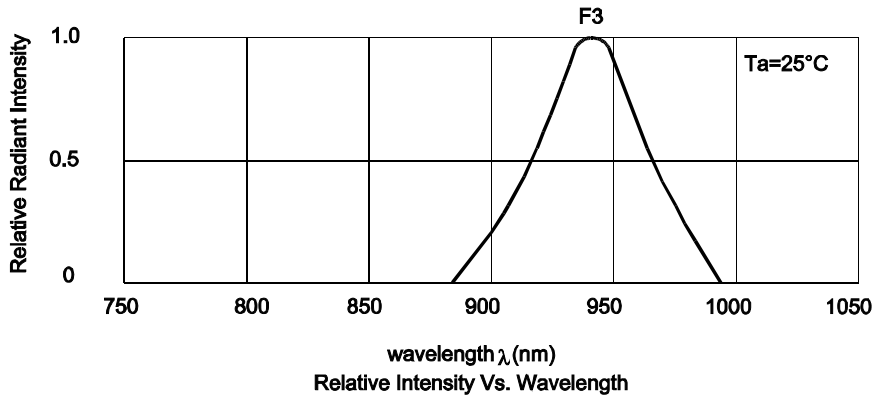
Absolute Maximum Ratings at TA=25°C

Parameter	Symbol	Values	Units
Power dissipation	P _D	80	mW
DC Forward Current	I _F	50	mA
Peak Forward Current [1]	i _{FS}	1.2	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _A	-40 To +85	°C
Storage Temperature	T _{STG}	-40 To +85	°C

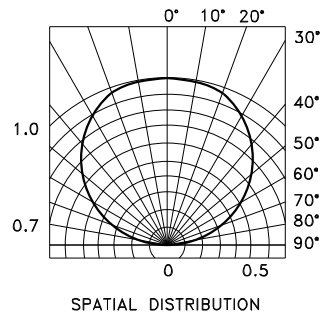
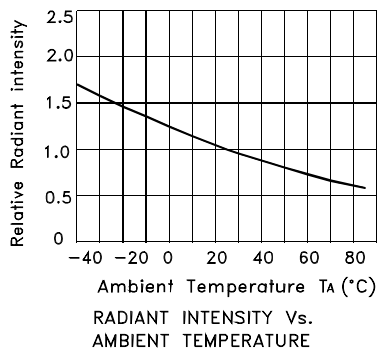
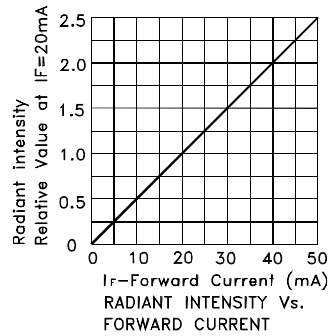
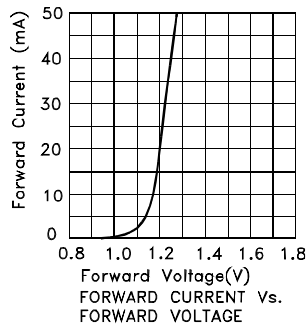
Note:

1. 1/100 Duty Cycle, 10μs Pulse Width.

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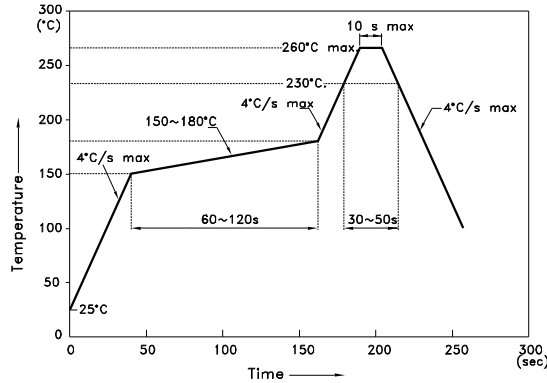


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Reflow soldering is recommended and the soldering profile is shown below.
 Other soldering methods are not recommended as they might cause damage to the product.

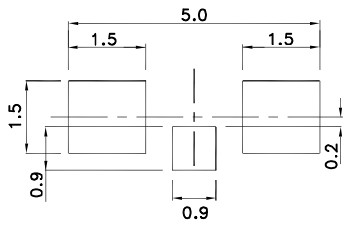
Reflow Soldering Profile For Lead-free SMT Process.



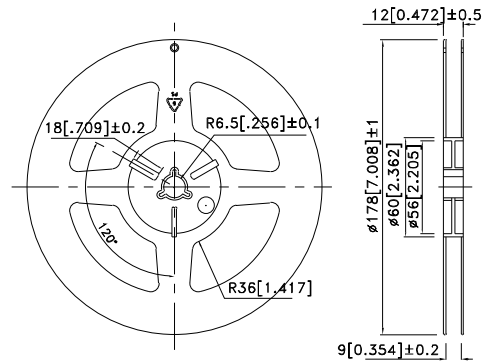
NOTES:

1. We recommend the reflow temperature 245°C(+/-5°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.
3. Number of reflow process shall be 2 times or less.

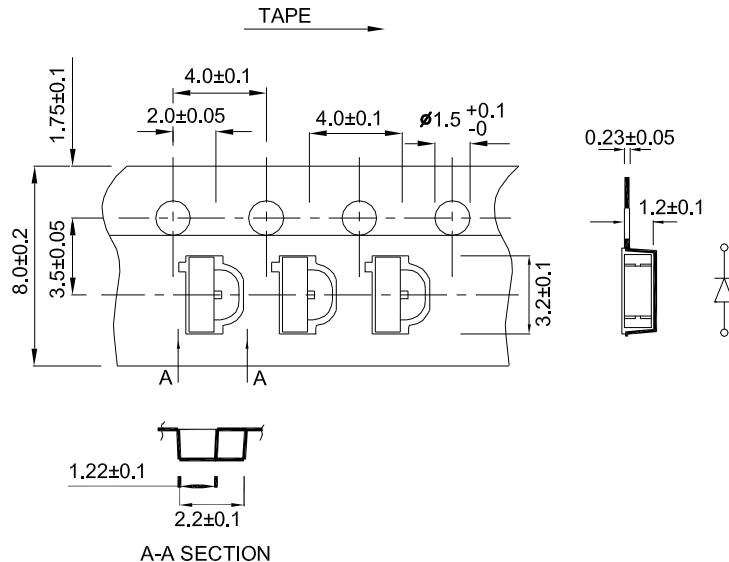
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



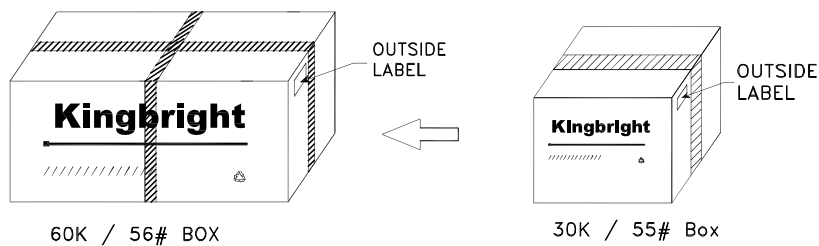
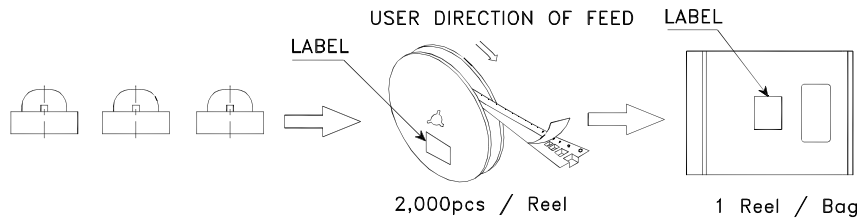
Tape Specifications (Units : mm)




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PACKING & LABEL SPECIFICATIONS

APA3010F3C-GX



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P/NO: APA3010xxx	
QTY: 2,000 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 xxxxxxxxxxxxxxxxxxxxxxxxxxxx	
RoHS Compliant	

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