

PRELIMINARY SPEC

Part Number: APECVA3010F3C

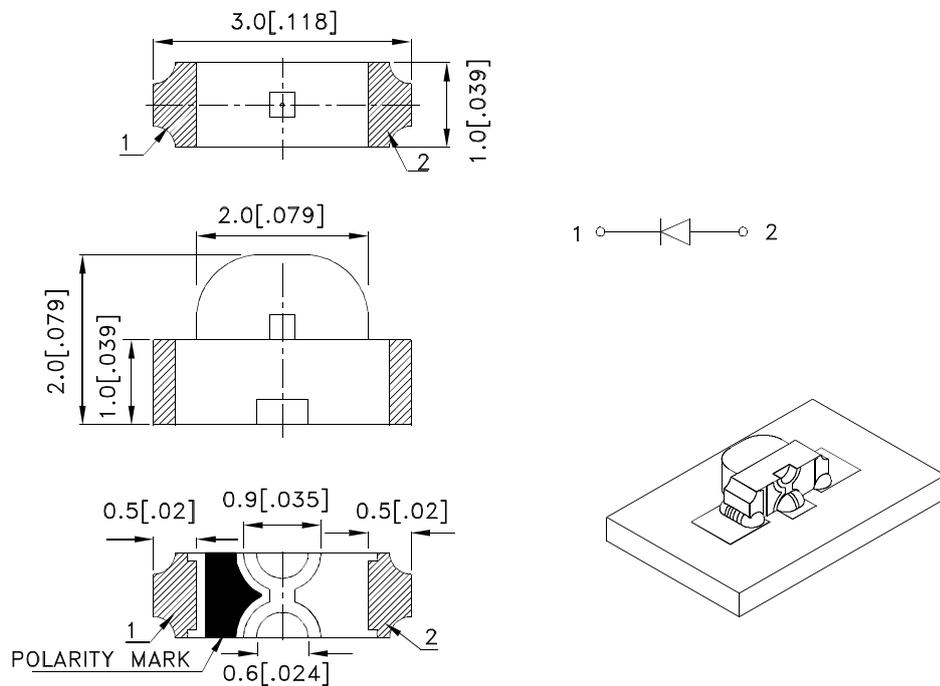
Features

- 3.0mmx1.0mm SMT LED, 2.0mm thickness.
- Mechanically and spectrally matched to the phototransistor.
- Package : 2000pcs / reel.
- Moisture sensitivity level : level 3.
- 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. Specifications are subject to change without notice.
4. The device has a single mounting surface. The device must be mounted according to the specifications.



Selection Guide

Part No.	Dice	Lens Type	Po (mW/sr) [2] @ 20mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
APECVA3010F3C	F3 (GaAs)	WATER CLEAR	0.7	2	120°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. Radiant Intensity/ luminous flux: +/-15%.

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	μA	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:

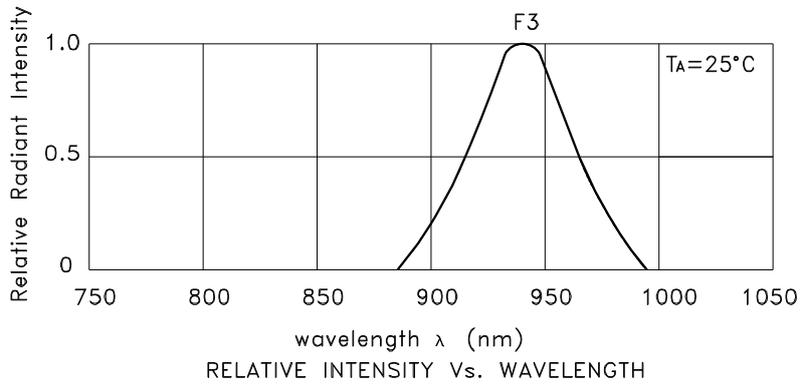
1. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

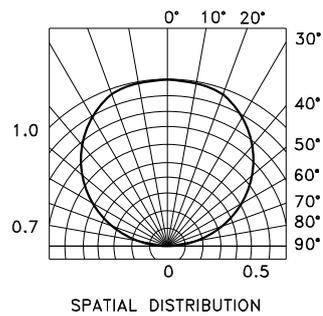
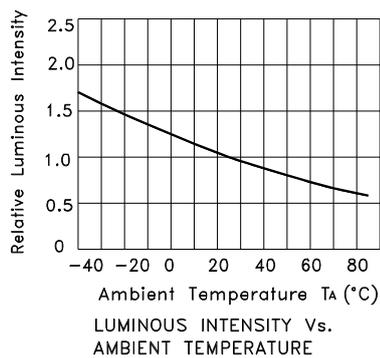
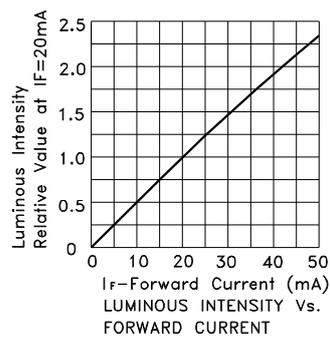
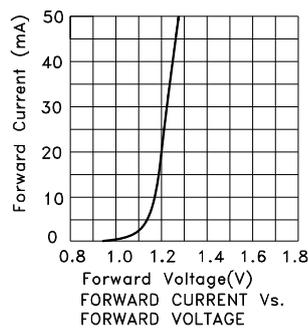
Parameter	Symbol	F3	Units
Power dissipation	P _T	80	mW
DC Forward Current	I _F	50	mA
Peak Forward Current [1]	i _{FS}	1.2	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _A	-40 To +85	°C
Storage Temperature	T _{STG}	-40 To +85	°C

Note:

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



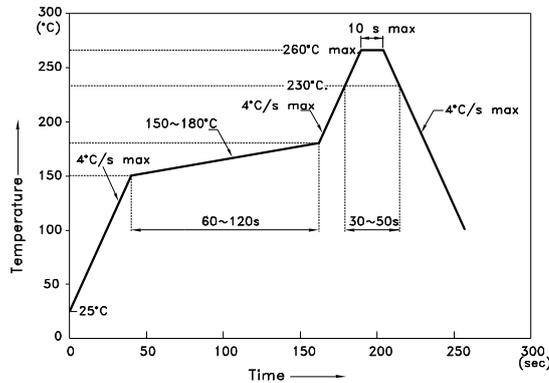
APECVA3010F3C



APECVA3010F3C

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.

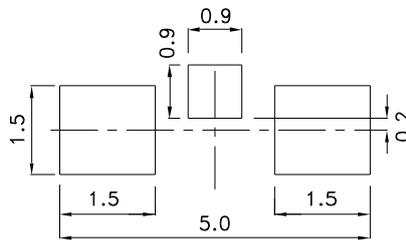
Reflow Soldering Profile For Lead-free SMT Process.



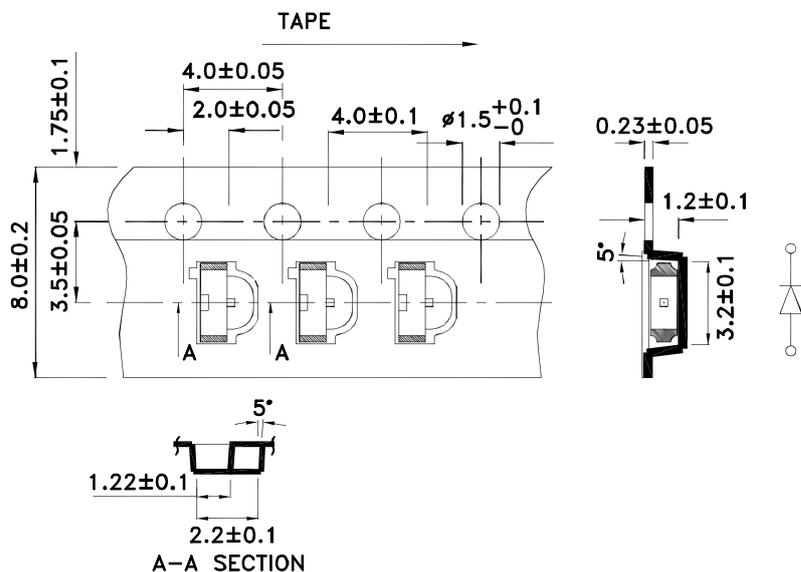
NOTES:

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)



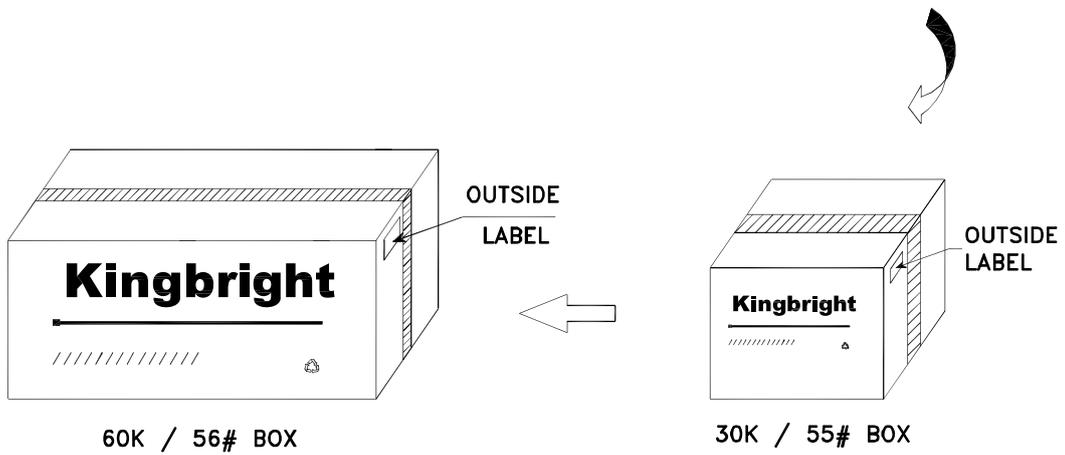
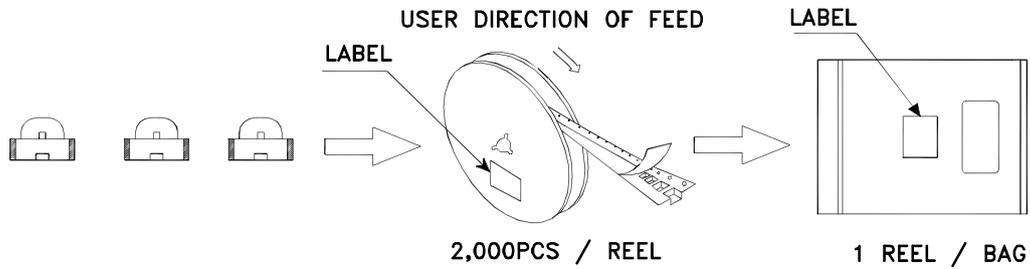
Tape Specifications (Units : mm)



Kingbright

PACKING & LABEL SPECIFICATIONS

APECVA3010F3C



<h1>Kingbright</h1>	
P/N0: APECVA3010xxx	
QTY: 2,000 pcs	Q.C.
S/N: XXXX	<div style="border: 1px solid black; border-radius: 50%; padding: 5px; display: inline-block;"> Q C XX XX XXXX PASSED </div>
CODE: XXX	
LOT NO:	
 <small>XXXXXXXXXXXXXXXXXXXXXXXXXXXX</small>	
RoHS Compliant	

Mouser Electronics

Authorized Distributor

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