

3.0mmx1.0 mm RIGHT ANGLE INFRARED **EMITTING DIODE**

Part Number: APA3010F3C-GX

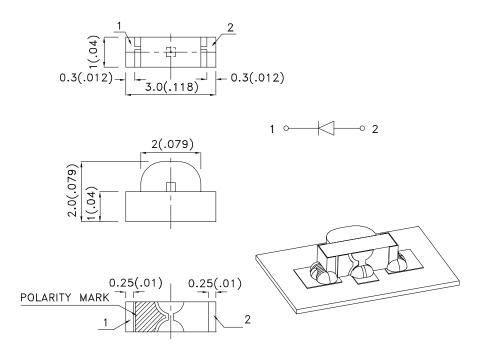
Features

- 3.0mmx1.0mm right angle SMT LED, 2.0mm 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



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





SPEC NO: DSAL3678 **REV NO: V.2A DATE: NOV/15/2011** PAGE: 1 OF 5 APPROVED: WYNEC DRAWN: Y.H.Wu ERP: 1203000562 **CHECKED: Allen Liu**

Selection Guide

Part No.	Dice	Lens Type	Po (mW/sr) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APA3010F3C-GX	F3 (GaAs)	Water Clear	1.2	3	120°
			*0.8	*2	

- 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.

Electrical / Optical Characteristics at TA=25°C

Parameter	P/N	Symbol	Тур.	Max.	Units	Test Conditions
Forward Voltage [1]	F3	VF	1.2	1.6	V	IF=20mA
Reverse Current	F3	lR		10	uA	V _R = 5V
Capacitance	F3	С	90		pF	VF=0V;f=1MHz
Peak Spectral Wavelength	F3	λP	940		nm	IF=20mA
Spectral Bandwidth	F3	Δλ1/2	50		nm	IF=20mA

Notes:

1.Forward Voltage: +/-0.1V.
2.Wavelength value is traceable to the CIE127-2007 compliant national standards.

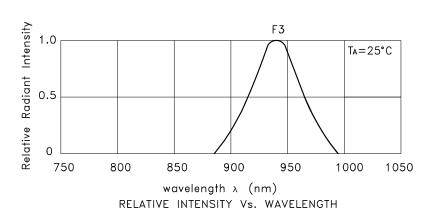
Absolute Maximum Ratings at TA=25°C

Autoriate maximum ratings at 171 20 0						
Parameter	Symbol	F3	Units			
Power dissipation	PD	80	mW			
DC Forward Current	lF	50	mA			
Peak Forward Current [1]	iFS	1.2	А			
Reverse Voltage	VR	5	V			
Operating Temperature	TA	-40 To +85	°C			
Storage Temperature	Тѕтс	-40 To +85	°C			

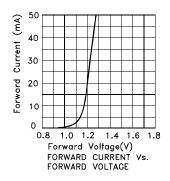
Note: 1. 1/100 Duty Cycle, 10µs Pulse Width.

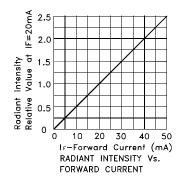
SPEC NO: DSAL3678 **REV NO: V.2A** DATE: NOV/15/2011 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Y.H.Wu ERP: 1203000562

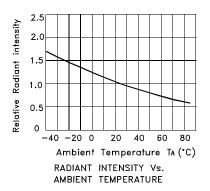
Radiant Intensity/ luminous flux: +/-15%.
 *Radiant Intensity value is traceable to the CIE127-2007 compliant national standards.

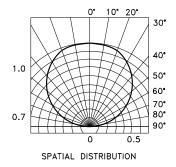


APA3010F3C-GX









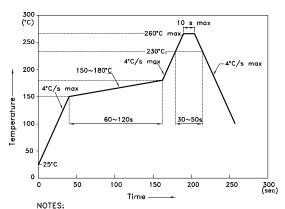
SPEC NO: DSAL3678 REV NO: V.2A DATE: NOV/15/2011 PAGE: 3 OF 5

APPROVED: WYNEC CHECKED: Allen Liu DRAWN: Y.H.Wu ERP: 1203000562

APA3010F3C-GX

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.

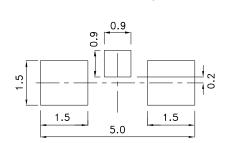
Reflow Soldering Profile For Lead-free SMT Process.



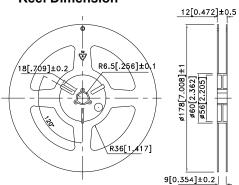
- NOTES:

 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.

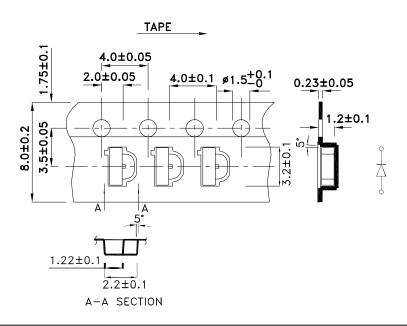
Recommended Soldering Pattern (Units: mm; Tolerance: ± 0.1)



Reel Dimension



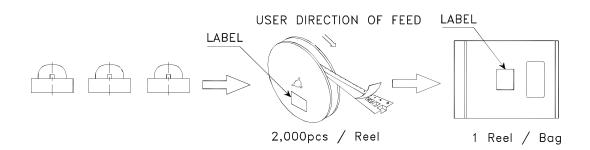
Tape Specifications (Units: mm)

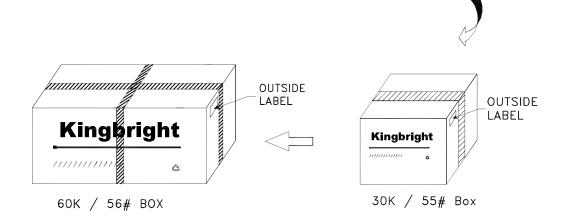


SPEC NO: DSAL3678 **REV NO: V.2A DATE: NOV/15/2011** PAGE: 4 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: Y.H.Wu ERP: 1203000562

PACKING & LABEL SPECIFICATIONS

APA3010F3C-GX







SPEC NO: DSAL3678 APPROVED: WYNEC REV NO: V.2A CHECKED: Allen Liu DATE: NOV/15/2011 DRAWN: Y.H.Wu PAGE: 5 OF 5 ERP: 1203000562