

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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3.0x1.0 mm INFRARED EMITTING DIODE

PRELIMINARY SPEC

Part Number: APECVA3010F3C

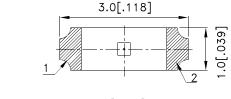
Features

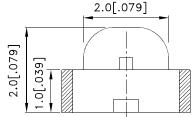
- 3.0mmx1.0mm SMT LED, 2.0mm thickness.
- Mechanically and spectrally matched to the phototransistor.
- Package: 2000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

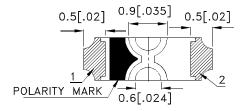
Description

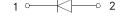
F3 Made with Gallium Arsenide Infrared Emitting diodes.

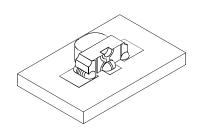
Package Dimensions











- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is ±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.





SPEC NO: DSAJ1856 **REV NO: V.1** DATE: MAR/19/2009 PAGE: 1 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: S.P.Chen ERP: 1203009101

Selection Guide

Part No.	Dice	Lens Type	Po (mW/sr) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
APECVA3010F3C	F3 (GaAs)	WATER CLEAR	0.7	2	120°

- 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	Тур.	Max.	Units	Test Conditions
Forward Voltage [1]	F3	VF	1.2	1.6	V	IF=20mA
Reverse Current	F3	lr		10	uA	VR = 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

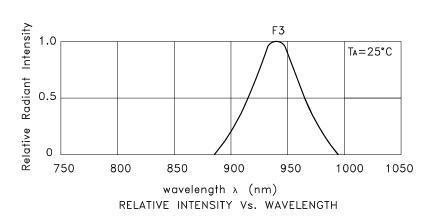
Absolute Maximum Ratings at TA=25°C

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

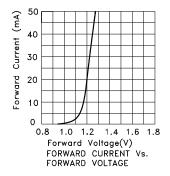
SPEC NO: DSAJ1856 **REV NO: V.1** DATE: MAR/19/2009 PAGE: 2 OF 5 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: S.P.Chen ERP: 1203009101

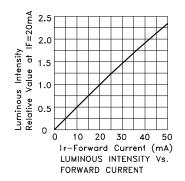
Note: 1. Forward Voltage: +/-0.1V.

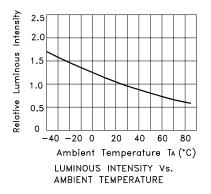
Note: 1. 1/100 Duty Cycle, 10µs Pulse Width.

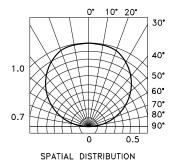


APECVA3010F3C









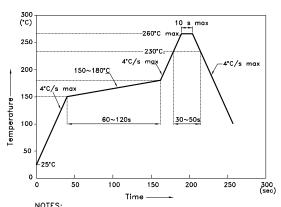
 SPEC NO: DSAJ1856
 REV NO: V.1
 DATE: MAR/19/2009
 PAGE: 3 OF 5

 APPROVED: WYNEC
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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.



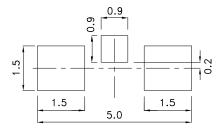
NOTES:

1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.

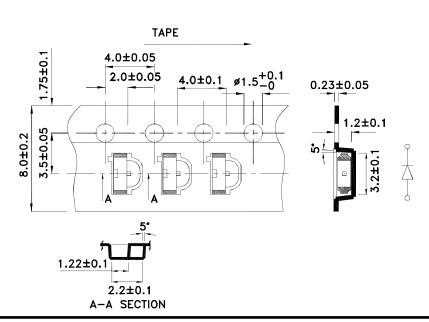
2.Don't cause stress to the epoxy resin while it is exposed to high temperature.

3.Number of reflow process shall be 2 times or less.

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

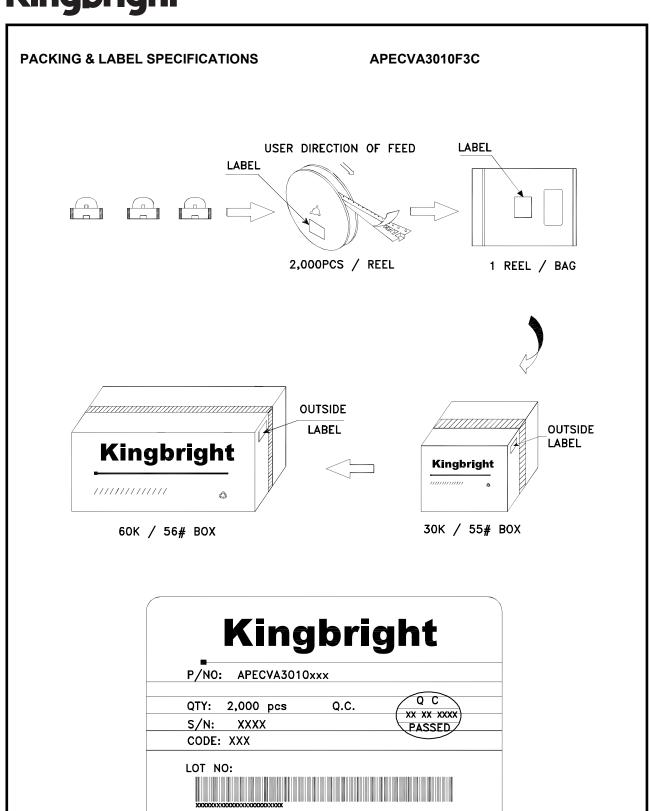


Tape Specifications (Units: mm)



 SPEC NO: DSAJ1856
 REV NO: V.1
 DATE: MAR/19/2009
 PAGE: 4 OF 5

 APPROVED: WYNEC
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 ERP: 1203009101



SPEC NO: DSAJ1856 APPROVED: WYNEC REV NO: V.1 CHECKED: Allen Liu DATE: MAR/19/2009 DRAWN: S.P.Chen

RoHS Compliant

PAGE: 5 OF 5 ERP: 1203009101