

Part Number: AM2520F3C03

Features

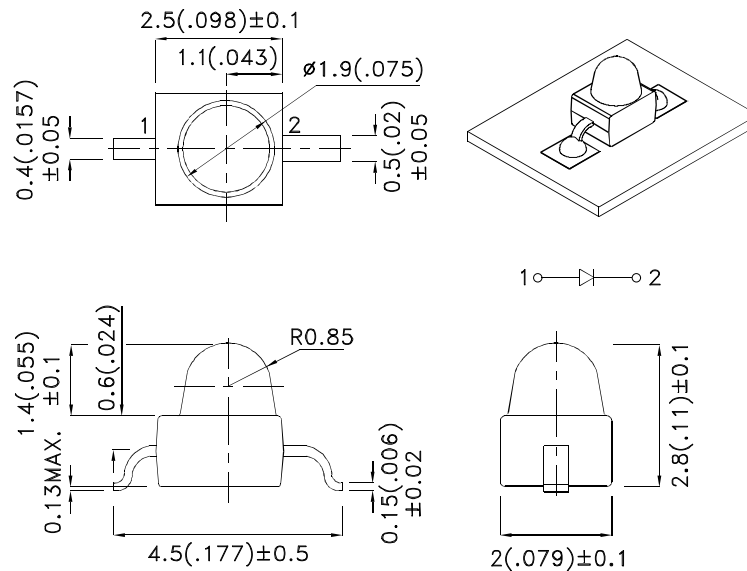
- Subminiature package.
- Mechanically and spectrally matched to the phototransistor.
- Gull wing lead.
- Long life - solid state reliability.
- Low package profile.
- Package : 1000pcs / reel.
- Moisture sensitivity level : level 3.
- RoHS compliant.

Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

Package Dimensions

Datasheet.Directory



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ " unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.
5. 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]
			Code.	Min.	Max.	2θ1/2
AM2520F3C03	F3 (GaAs)	Water Clear	C	5	8	20°
			D	8	12	
			E	12	20	

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%.

Electrical / Optical Characteristics at TA=25°C

Parameter	P/N	Symbol	Min.	Typ.	Max.	Units	Test Conditions
Forward Voltage [1]	F3	V _F	1.0	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	920		960	nm	I _F =20mA
Spectral Bandwidth	F3	Δλ1/2		50		nm	I _F =20mA

Note:

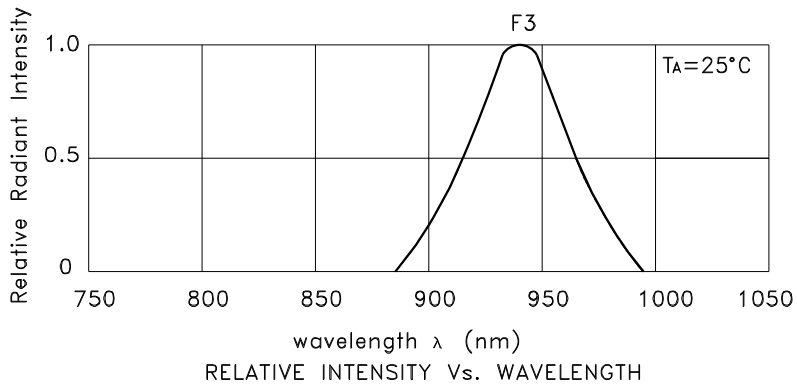
1. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

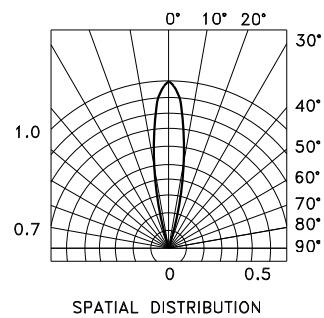
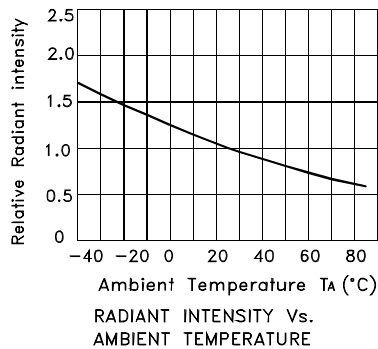
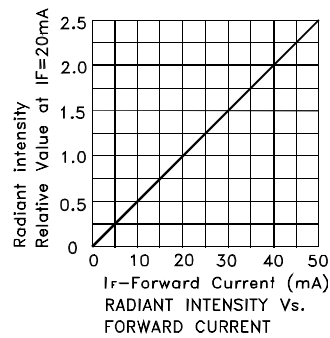
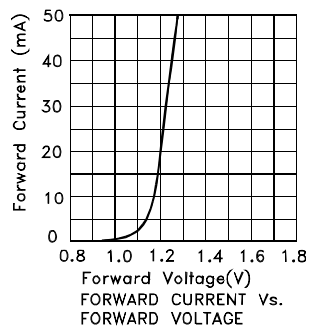
Parameter	Symbol	F3	Units
Power dissipation	P _D	80	mW
DC Forward Current	I _F	50	mA
Peak Forward Current [1]	i _{FS}	1.2	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _A	-40 To +85	°C
Storage Temperature	T _{STG}	-40 To +85	°C

Note:

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



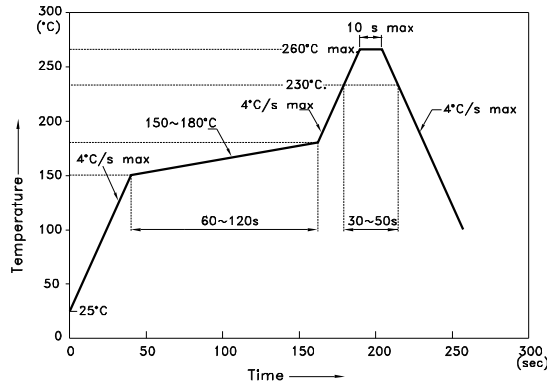
AM2520F3C03



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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.

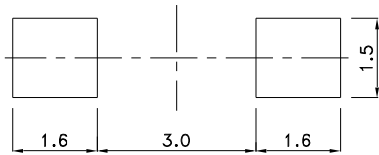
Reflow Soldering Profile For Lead-free SMT Process.



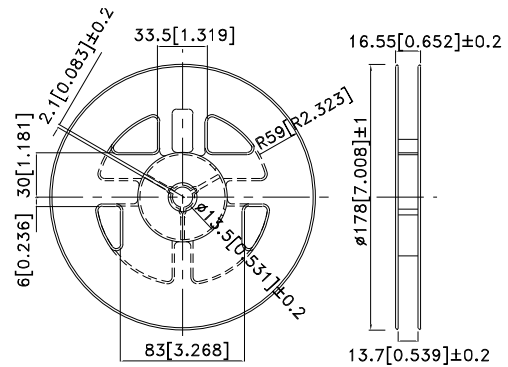
NOTES:

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.

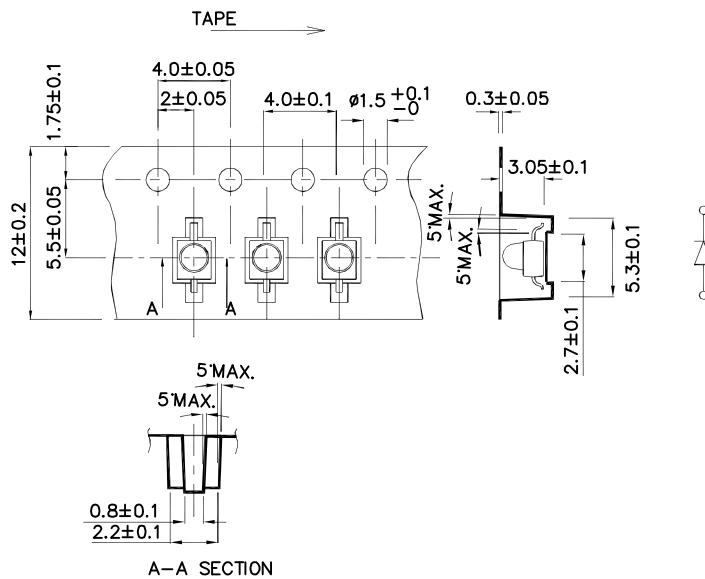
Recommended Soldering Pattern (Units : mm; Tolerance: ± 0.1)



Reel Dimension



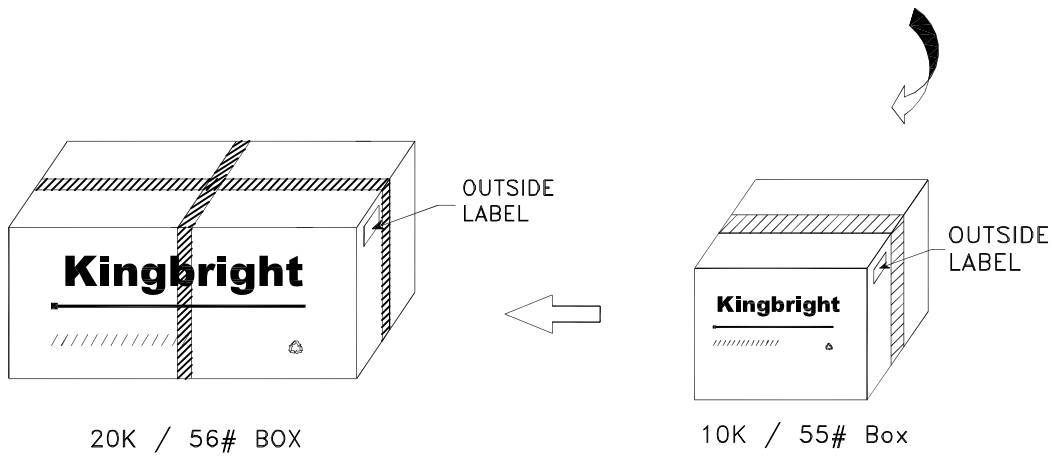
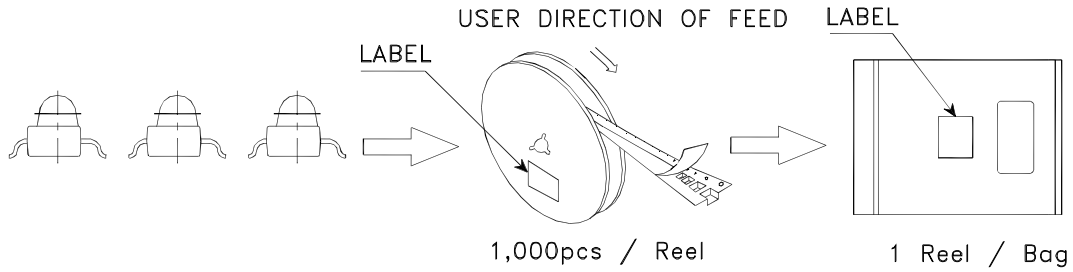
Tape Specifications (Units : mm)




Kingbright

PACKING & LABEL SPECIFICATIONS

AM2520F3C03



<h1>Kingbright</h1>	
P/NO: AM2520xxx03	
QTY: 1,000 pcs	Q.C. Q C xx xx xxxx PASSED
S/N: XXXX	
CODE: XXX	
LOT NO:	
 XXXXXXXXXXXXXXXXXXXXXXXXXXXX	
RoHS Compliant	

All design applications should refer to Kingbright application notes available at <http://www.KingbrightUSA.com/ApplicationNotes>