

AM4457F3C

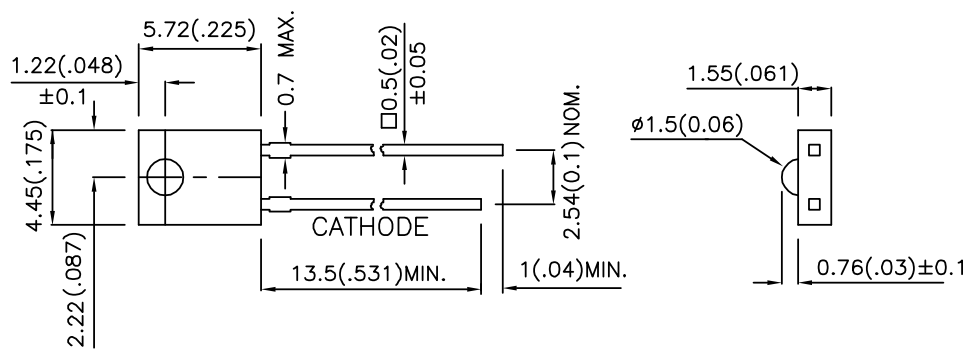
### Features

- SIDE LOOKING PACKAGE.
- MECHANICALLY AND SPECTRALLY MATCHED TO THE PHOTOTRANSISTOR.
- WATER CLEAR LENS.
- RoHS COMPLIANT.

### Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25(0.01)$  unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Po (mW/sr) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
AM4457F3C	GaAs	WATER CLEAR	0.8	4	70°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at TA=25°C

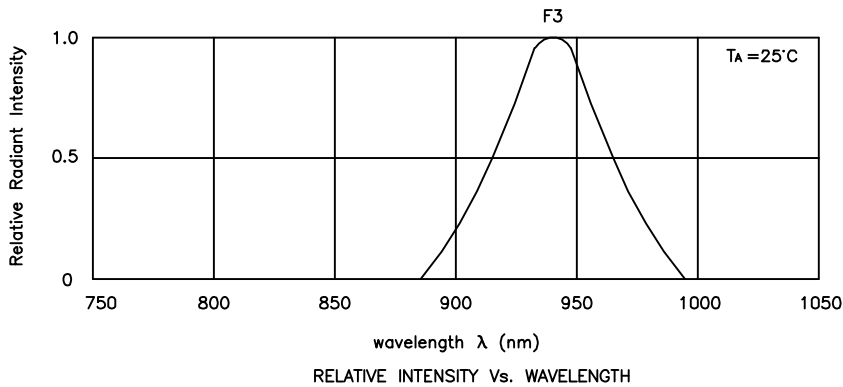
Parameter	P/N	Symbol	Typ.	Max.	Units	Test Conditions
Forward Voltage	F3	V <sub>F</sub>	1.2	1.6	V	I <sub>F</sub> =20mA
Reverse Current	F3	I <sub>R</sub>	-	10	uA	V <sub>R</sub> =5V
Capacitance	F3	C	90	-	pF	V <sub>F</sub> =0V;f=1MHz
Peak Spectral Wavelength	F3	λ <sub>P</sub>	940	-	nm	I <sub>F</sub> =20mA
Spectral Bandwidth	F3	Δλ <sub>1/2</sub>	50	-	nm	I <sub>F</sub> =20mA

## Absolute Maximum Ratings at TA=25°C

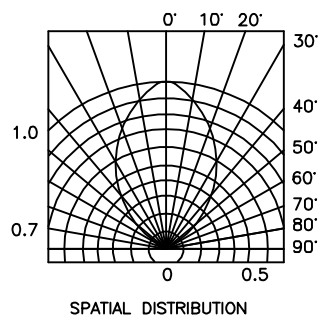
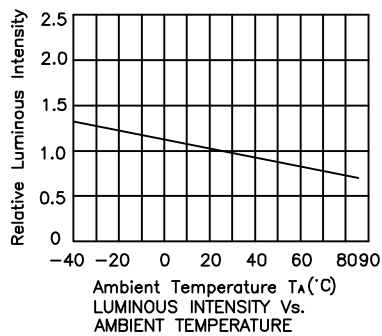
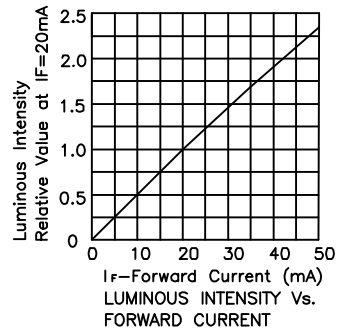
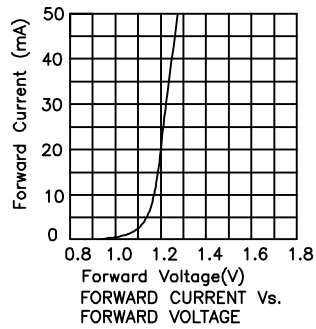
Parameter	Symbol	F3	Units
Power Dissipation	P <sub>T</sub>	100	mW
DC Forward Current	I <sub>F</sub>	50	mA
Peak Forward Current[1]	i <sub>F</sub> S	1.2	A
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>A</sub>	-40 To +85	°C
Storage Temperature	T <sub>STG</sub>	-40 To +85	°C
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

Notes:

1. 1/100 Duty Cycle, 10us Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



## AM4457F3C



### Remarks:

If special sorting is required (e.g. binning based on forward voltage or radiant intensity), the typical accuracy of the sorting process is as follows:

1. Radiant Intensity: +/-15%
2. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.