

AP2012F3C

AP2012SF4C

Features

- WATER CLEAR LENS AVAILABLE.
- 2.0mmx1.2mm SMT LED, 1.1mm THICKNESS.
- HIGH POWER OUTPUT.
- PACKAGE: 2000PCS/REEL.

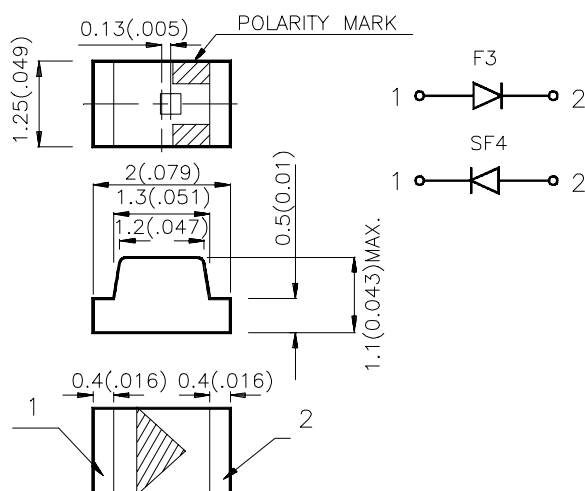
Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

SF4 Made with Gallium Aluminum Arsenide Infrared

Emitting diodes.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.1(0.004)$ unless otherwise noted.
3. Lead spacing is measured where the lead emerge 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
AP2012F3C	GaAs	WATER CLEAR	0.5	1.2	120°
AP2012SF4C	GaAlAs	WATER CLEAR	0.5	1	120°

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 T_A=25°C

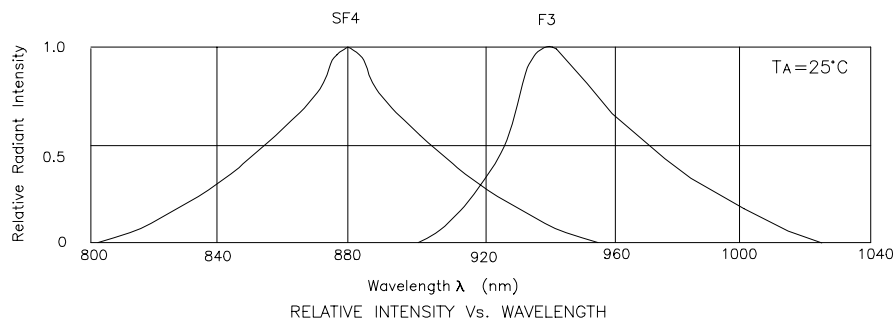
Item	P/N	Symbol	Typ.	Max.	Unit	Condition
Forward Voltage	F3 SF4	V _F	1.2 1.3	1.5 1.7	V	I _F =20mA
Reverse Current	F3 SF4	I _R	-	10 10	μA	V _R =5V
Junction Capacitance	F3 SF4	C	90 90	-	pF	V=0 f=1MHz
Peak Spectral Wavelength	F3 SF4	λ _P	940 880	-	nm	I _F =20mA
Spectral Bandwidth	F3 SF4	Δλ	50 50	-	nm	I _F =20mA

Absolute Maximum Ratings at T_A=25°C

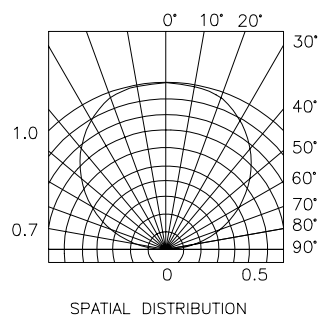
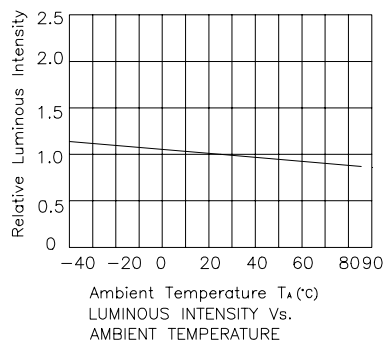
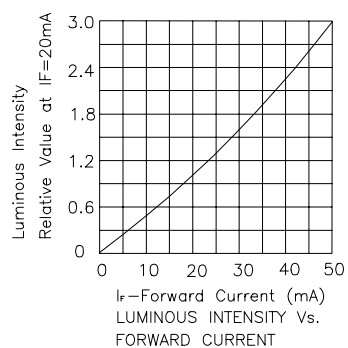
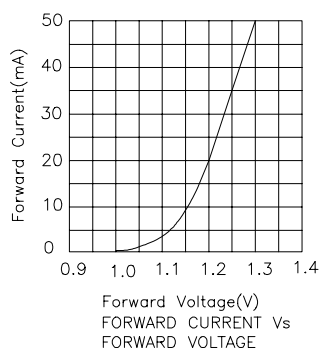
Item	Symbol	Maximum Rating	Units
Power Dissipation	P _T	100	mW
Forward Current	I _F	50	mA
Peak Forward Current	i _{FS}	1.2	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _A	-40~ +85	°C
Storage Temperature	T _{STG}	-40~ +85	°C

Note:

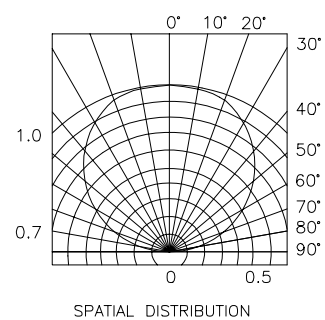
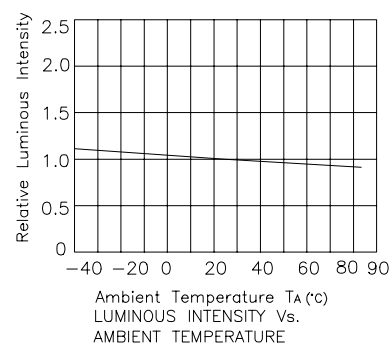
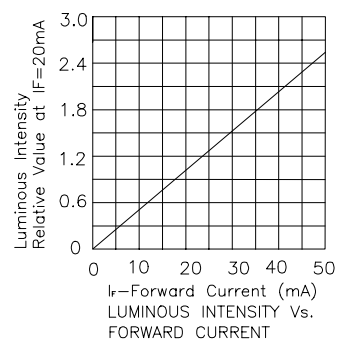
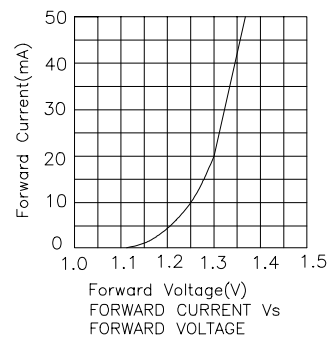
1. 1/100 Duty Cycle, 10us Pluse Width.



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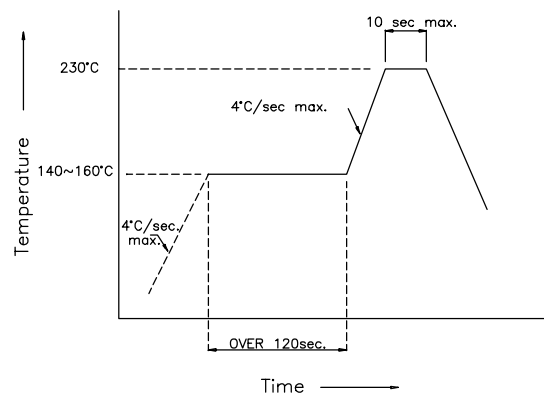


AP2012SF4C

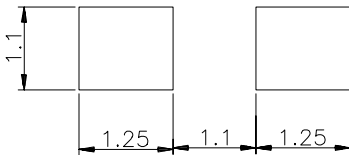


AP2012F3C,AP2012SF4C
SMT Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



Recommended Soldering Pattern
(Units : mm)



Tape Specifications
(Units : mm)

