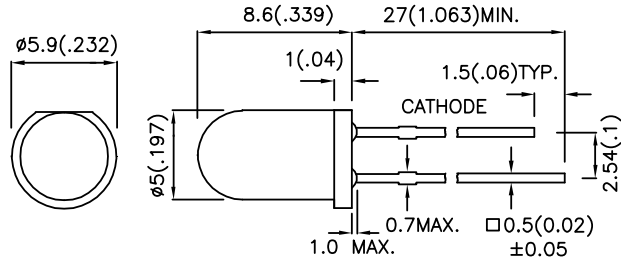


Package Dimensions

T-1 3/4 (5mm) INFRA-RED EMITTING DIODE

E7113SF7C



Features

- MECHANICALLY AND SPECTRALLY MATCHED TO THE E53P3C PHOTOTRANSISTOR.
- WATER CLEAR LENS.
- RoHS COMPLIANT.

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.

Description

SF7 Made with Gallium Aluminum Arsenide Infrared Emitting diodes.

Selection Guide

Part No.	Emitting Color +Material	λP (nm)	Lens Type	Po (mW/sr) @ 20mA*50mA		Viewing Angle
				Min.	Typ.	2 θ 1/2
E7113SF7C	GaAlAs	850	WATER CLEAR	10	40	20°
				*50	*100	

Notes:

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. * Luminous intensity with asterisk is measured at 50mA.

Electrical / Optical Characteristics at $T_A=25^\circ\text{C}$

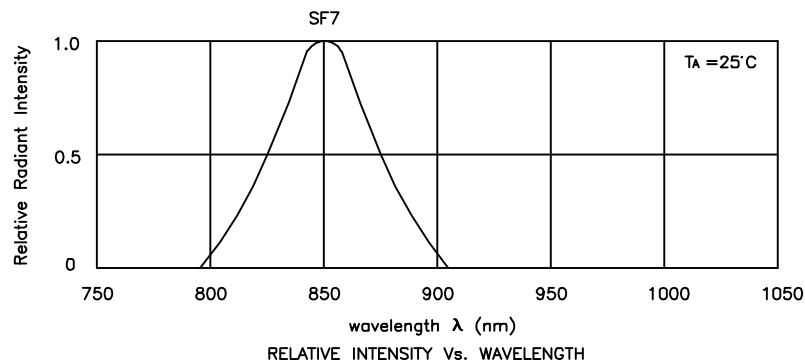
Item	P/N	Symbol	Typ.	Max.	Units	Test Conditions
Forward Voltage	SF7	V_F	1.4	1.6	V	$I_F=20\text{mA}$
Reverse Current	SF7	I_R	-	10	μA	$V_R=5\text{V}$
Capacitance	SF7	C	30	-	pF	$V_F=0\text{V}; f=1\text{MHz}$
Peak Spectral Wavelength	SF7	λ_P	850	-	nm	$I_F=20\text{mA}$
Spectral Bandwidth	SF7	$\Delta\lambda_{1/2}$	50	-	nm	$I_F=20\text{mA}$

Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

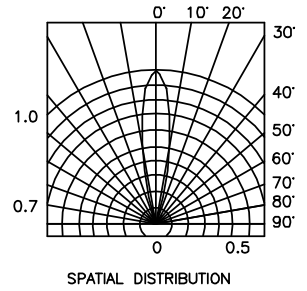
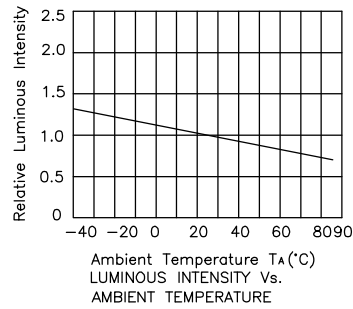
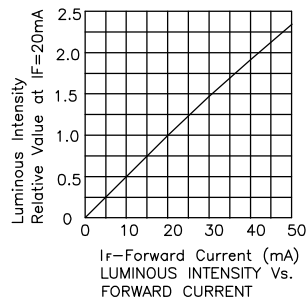
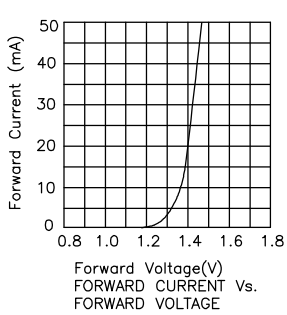
Parameter	Symbol	SF7	Units
Power Dissipation	P_T	100	mW
DC Forward Current	I_F	50	mA
Peak Forward Current[1]	i_{FS}	1	A
Reverse Voltage	V_R	5	V
Operating Temperature	T_A	-40 To +85	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 To +85	$^\circ\text{C}$
Lead Solder Temperature [2]	260 $^\circ\text{C}$ For 3 Seconds		
Lead Solder Temperature [3]	260 $^\circ\text{C}$ For 5 Seconds		

Notes:

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



E7113SF7C



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.