

Kingbright®

T-1 (3mm) INFRA-RED EMITTING DIODES

L-934F3C

L-934SF4C

L-934F3BT

L-934SF4BT

Features

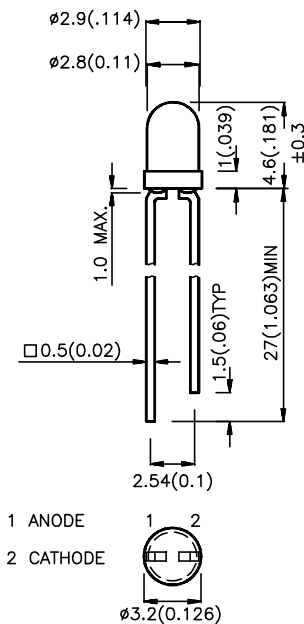
- MECHANICALLY AND SPECTRALLY MATCHED TO THE L-932P3C PHOTOTRANSISTOR.
- BOTH WATER CLEAR LENS AND BLUE TRANSPARENT LENS AVAILABLE HIGH POWER OUTPUT.

Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

SF4 Made with Gallium Aluminum Arsenide 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 lead emerges package.
 4. Specifications are subjected to change without notice.

Selection Guide

Part No.	Lens Type	Iv (mW/sr) @20mA		Viewing Angle
		Min.	Max.	
L-934F3C	Water Clear	3.2	20	50°
L-934F3BT	Blue Transparent	3.2	20	50°
L-934SF4C	Water Clear	3.2	20	50°
L-934SF4BT	Blue Transparent	3.2	20	50°

Note:
1. $\theta 1/2$ is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

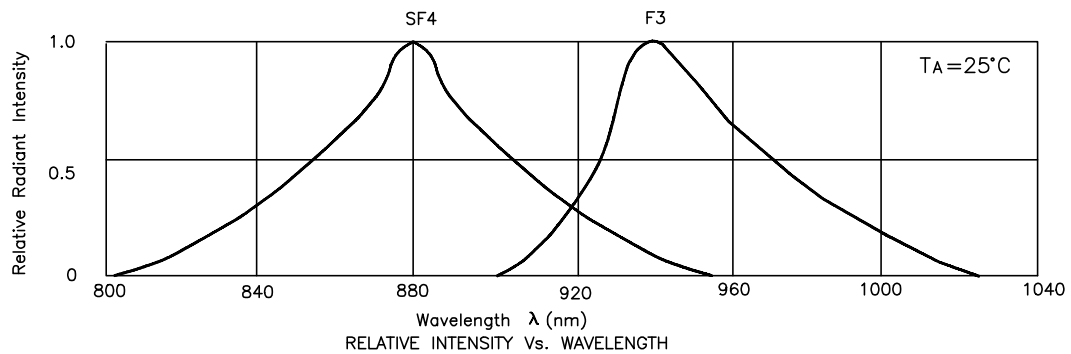
Electrical / Optical Characteristics at T_A=25°C

Item	P/N	Symbol	Typ.	Max.	Unit	Condition
Forward Voltage	L-934F3C L-934F3BT L-934SF4C L-934SF4BT	V _F	1.2 1.2 1.3 1.3	1.5 1.5 1.7 1.7	V	I _F =20mA
Reverse Current	L-934F3C L-934F3BT L-934SF4C L-934SF4BT	I _R	-	10 10 10 10	μA	V _R =5V
Junction Capacitance	L-934F3C L-934F3BT L-934SF4C L-934SF4BT	C _o	90 90 90 90	-	pF	V=0 f=1MHz
Peak Spectral Wavelength	L-934F3C L-934F3BT L-934SF4C L-934SF4BT	I _R	940 940 880 880	-	nm	I _F =20mA
Spectral Bandwidth	L-934F3C L-934F3BT L-934SF4C L-934SF4BT	Δλ	50 50 50 50	-	nm	I _F =20mA

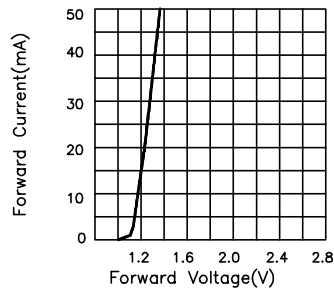
Absolute Maximum Ratings at T_A=25°C

Item	Symbol	Maximum Rating	Units
Power Dissipation	P _d	100	mW
Forward Current	I _F	50	mA
Peak Forward Current	I _p	1.2	A
Reverse Voltage	V _R	5	V
Operating Temperature	T _{opr}	-45~ +80	°C
Storage Temperature	T _{stg}	-45~ +80	°C

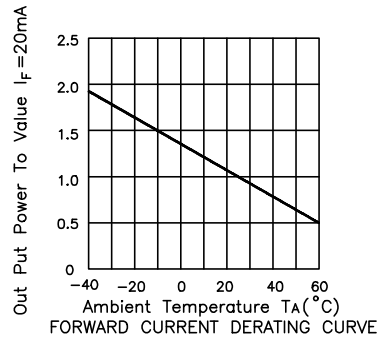
Note:
1.I_p Condition : 1/10 Duty Cycle, 0.1ms Pluse Width.



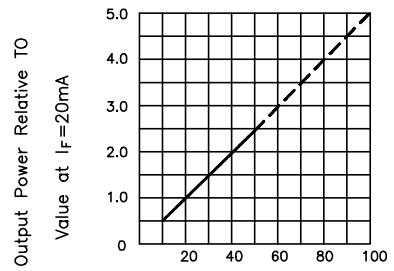
L-934F3C/L-934F3BT



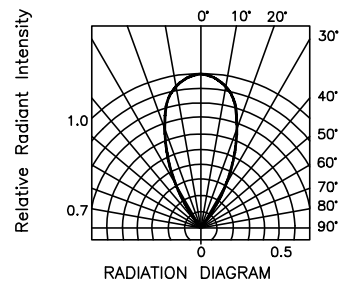
FORWARD CURRENT VS. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

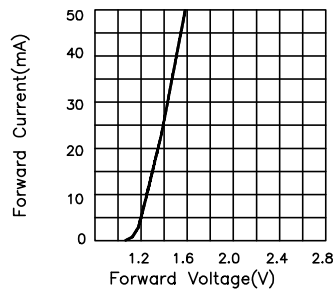


Relative Radiant Intensity Vs. Forward Current

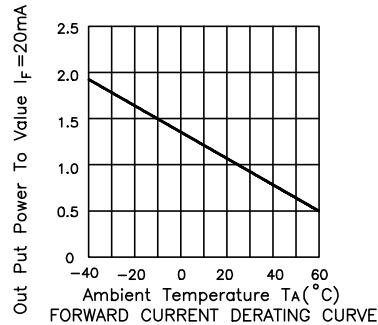


RADIATION DIAGRAM

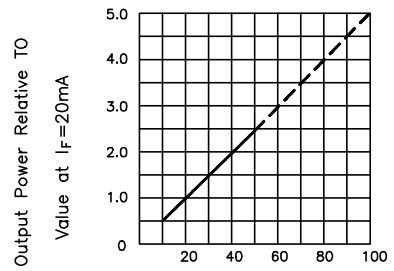
L-934SF4C/L-934SF4BT



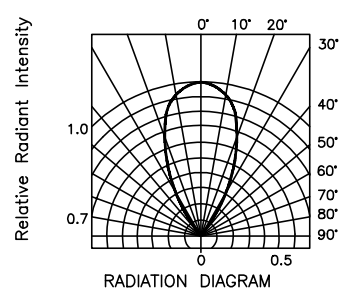
FORWARD CURRENT VS. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



Relative Radiant Intensity Vs. Forward Current



RADIATION DIAGRAM