

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

PRELIMINARY SPEC

WP7104F3C

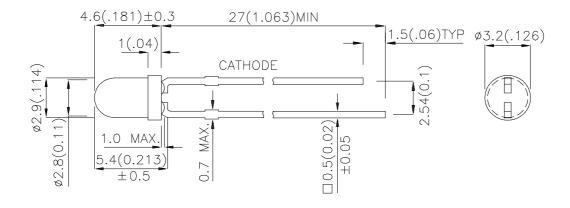
Features

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

Description

F3 Made with Gallium Arsenide Infrared Emitting diodes.

Package Dimensions



- All dimensions are in millimeters (inches).
 Tolerance is ±0.25(0.01") unless otherwise noted.
- Lead spacing is measured where the leads emerge from the package.
 Specifications are subject to change without notice.

SPEC NO: DSAF2297 **REV NO: V.1** DATE: APR/15/2005 PAGE: 1 OF 4 APPROVED: J. Lu CHECKED: Allen Liu DRAWN: W.J.ZHU ERP:1101008144

Kingbright

Selection Guide

Part No.	Dice	Lens Type	Po (mW/sr) @ 20mA*50mA		Viewing Angle
			Min.	Тур.	201/2
WP7104F3C	GaAs	WATER CLEAR	7	30	34°
			*18	*80	

Notes

1.01/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at Ta=25°C

Item	P/N	Symbol	Тур.	Max.	Units	Test Conditions
Forward Voltage	F3	VF	1.2	1.6	V	IF=20mA
Reverse Current	F3	lr	-	10	uA	VR=5V
Capacitance	F3	С	90	-	pF	VF=0V;f=1MHz
Peak Spectral Wavelength	F3	λΡ	940	-	nm	IF=20mA
Spectral Bandwidth	F3	Δλ1/2	50	-	nm	IF=20mA

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	F3	Units		
Power Dissipation	Рт	100	mW		
DC Forward Current	lF	50	mA		
Peak Forward Current[1]	irs	1.2	А		
Reverse Voltage	Vr	5	V		
Operating Temperature	Та	-40 To +85	°C		
Storage Temperature	Тѕтс	-40 To +85	°C		
Lead Solder Temperature [2]	260°C For 3 Seconds				
Lead Solder Temperature [3]	260°C For 5 Seconds				

Notes

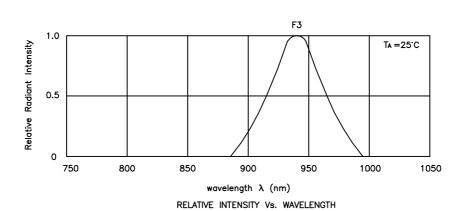
- 1. 1/100 Duty Cycle, 10us Pulse Width.
- 2. 2mm below package base.
- 3. 5mm below package base.

 SPEC NO: DSAF2297
 REV NO: V.1
 DATE: APR/15/2005
 PAGE: 2 OF 4

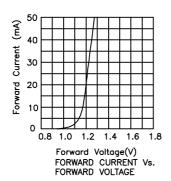
 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: W.J.ZHU
 ERP:1101008144

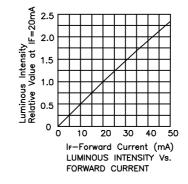
^{2.*} Luminous intensity with asterisk is measured at 50mA.

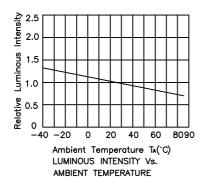
Kingbright

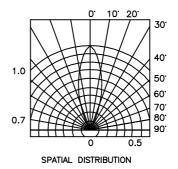


WP7104F3C





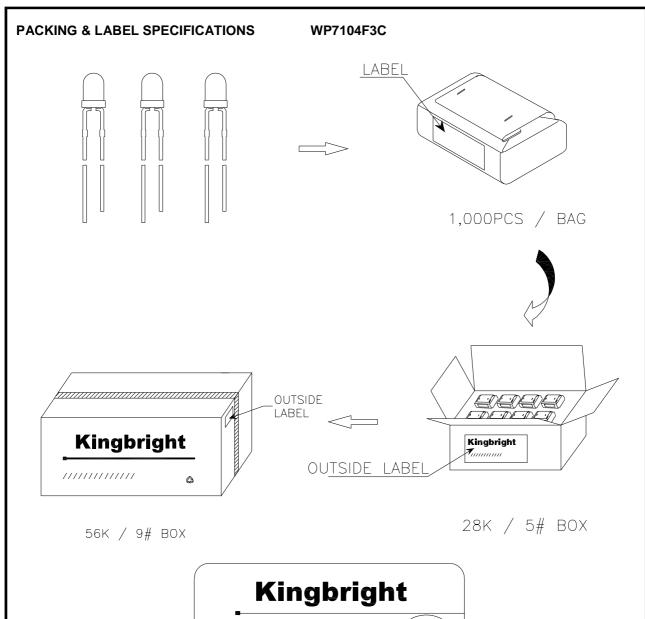




 SPEC NO: DSAF2297
 REV NO: V.1
 DATE: APR/15/2005
 PAGE: 3 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: W.J.ZHU
 ERP:1101008144

Kingbright





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.

 SPEC NO: DSAF2297
 REV NO: V.1
 DATE: APR/15/2005
 PAGE: 4 OF 4

 APPROVED: J. Lu
 CHECKED: Allen Liu
 DRAWN: W.J.ZHU
 ERP:1101008144