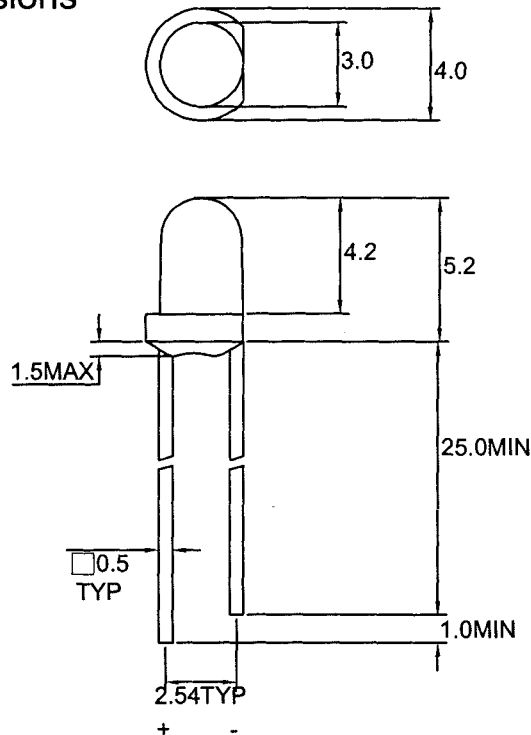


PART NO. LVIR2043-PF

Electronix Express Part No. 08LT383L-313

### Package Dimensions



Note : 1.All dimension are in millimeter tolerance is  $\pm 0.25$ mm unless otherwise noted.  
2.Specifications are subject to change without notice.

### Features:

1. High radiant intensity.
2. Suitable for pulsed applications.
3. Low average degradation.

### Descriptions:

The LVIR2043-PFseries are high power solution grown efficiency Gallium Arsenide infrared emitting diodes encapsulated in water clear plastic  
T-1 3/4 package individually

### Device Selection Guide:

PART NO	MATERIAL	LENS COLOR
LVIR2043-PF	GaAlAs/GaAs	Water Clear

## Absolute Maximum Ratings at Ta=25 °C

Parameter	Symbol	Ratings	UNIT
		VIR	
Forward Current	IF	50	mA
Peak Forward Current (300PPS, 10 $\mu$ s Pulse)	IFP	1	A
Power Dissipation	PD	100	mW
Reverse Voltage	Vr	5	V
Electrostatic Discharge	ESD	2000	V
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	°C

## Electrical Optical Characteristics (Aa=25°C)

PARAMETER	SYMBOL	Min.	Typ.	Max.	UNIT	TEST CONDITION
Radiant Intensity	Le	4.0	6		mW/sr	IF=20mA
Aperture Radiant Incidence	Ee	0.57	0.86		mW/cm <sup>2</sup>	IF=20mA
Peak Emission Wavelength	$\lambda$ peak		940		nm	IF=20mA
Spectral Line Half Width	$\Delta \lambda$		50		nm	IF=20mA
Forward Voltage	VF		1.2	1.6	V	IF=20mA
Reverse Current	IR			100	$\mu$ A	VR=5V
Viewing Angle	2 $\theta$ 1/2		30		deg	

Note : 1. The forward voltage data did not including  $\pm 0.1V$  testing tolerance.  
 2. The radiant intensity data did not including  $\pm 15\%$  testing tolerance.

# Typical Electro-Optical Characteristics Curve

## VIR CHIP

Fig.1 Forward Current vs. DC Forward Voltage

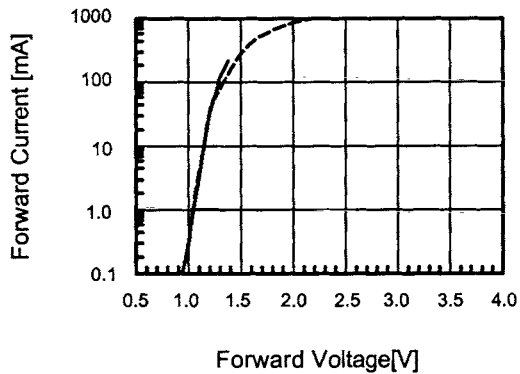


Fig.2 Relative Radiant Intensity vs.wavelength

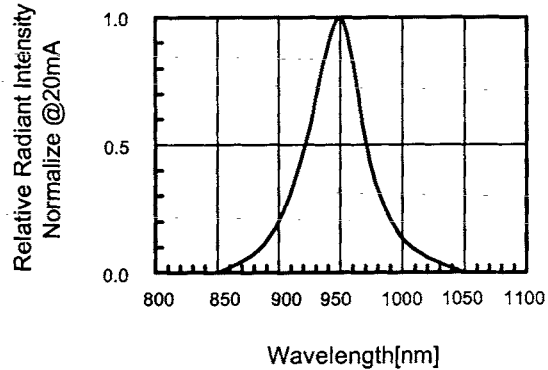


Fig.3. Relative Radiant Power vs. Forward Peak Current

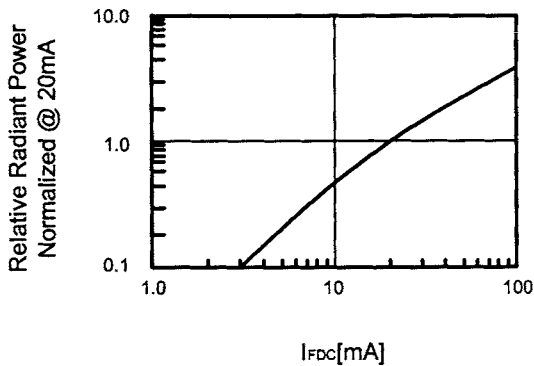


Fig.4 Relative Radiant Power vs. Forward Peak Current

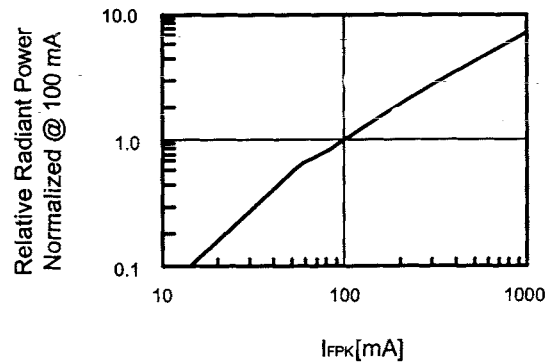


Fig.5 Forward DC Voltage vs. Temperature

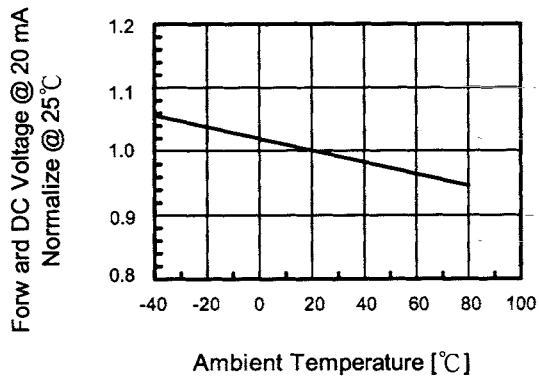


Fig.6 Relative Radiant Power vs. Temperature

