

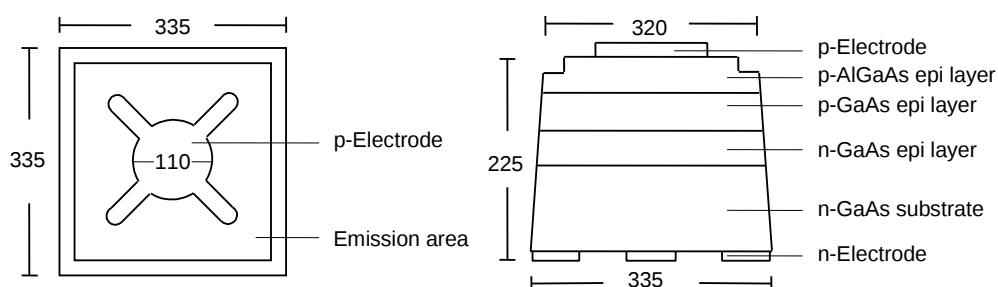
■ Features :

- AlGaAs/GaAs Wafer
- Good Spectral Matched to Si Detector
- High Power
- Low Forward Voltage

■ Typical Applications :

- Electrical White Board

■ Outline Dimensions : (Unit: μm)



■ Physical Structure :

Chip dimension	Chip size	335 $\pm$ 25 μm x 335 $\pm$ 25 μm
	Thickness	225 $\pm$ 25 μm
	Emission area	320 μm
	Bonding pad	110 $\pm$ 10 μm
Electrode	Top: P (anode)	Gold
	Backside: N (cathode)	Gold alloy
Surface condition	Frosted	

■ Electro-Optical Characteristics : ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 100 \text{ mA}$	-	1.34	1.50	V
		$I_F = 200 \text{ mA}$	-	1.47	1.65	
Reverse Voltage	V_R	$I_R = 10 \text{ uA}$	5	-	-	V
Wavelength	λ_p	$I_F = 20 \text{ mA}$	930	945	960	nm
Spectral width at half height	$\Delta\lambda$	$I_F = 20 \text{ mA}$	-	50	-	nm
Radiant Power	P_o	$I_F = 20 \text{ mA}$	0.90	-	-	mW

※ ED-E14IRA is designed for electrical white-board. OPTOTECH suggests the cup depth of lead frame has to be less than 500 μm . Please evaluate the package design carefully and discuss with OPTOTECH if the design of cup depth has to over than 500 μm .

■ Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. DC Forward Voltage

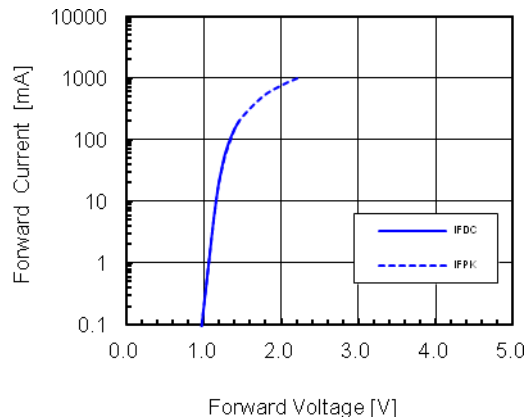


Fig 2. Relative Radian Power vs. Wavelength

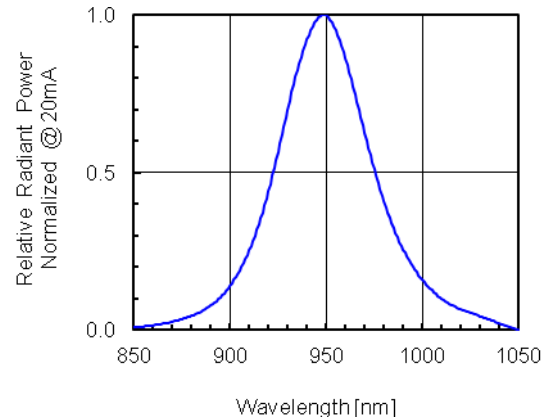
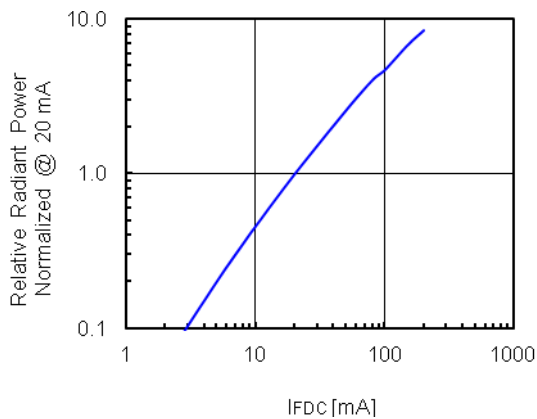
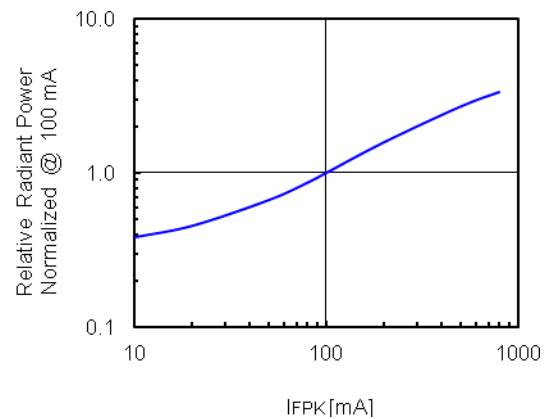
Fig 3. Relative Radiant Power
vs. Forward DC CurrentFig 4. Relative Radiant Power
Vs. Forward Peak Current

Fig 5. Forward DC Voltage vs. Temperature

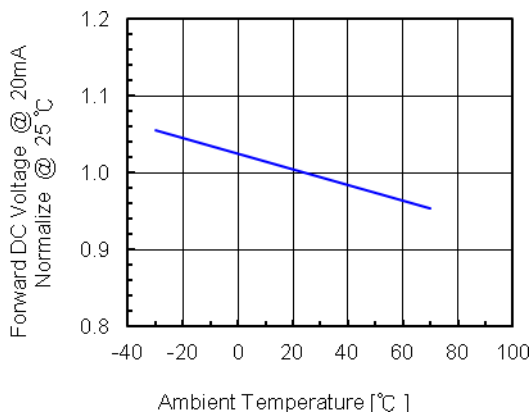


Fig 6. Relative Radiant Power vs. Temperature

