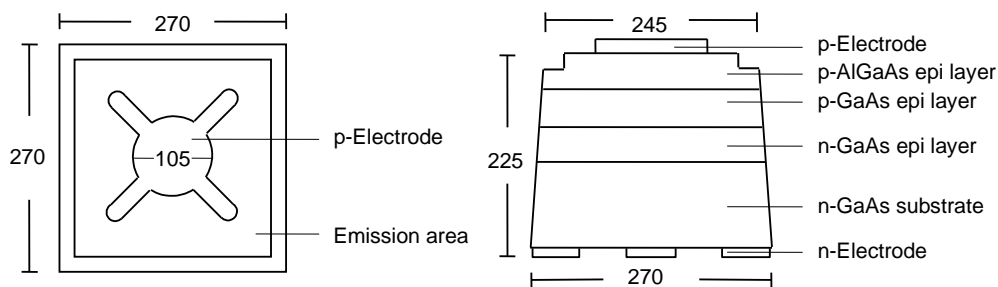## ■ Features :

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

■ Typical Applications :

- Electrical White Board

■ Outline Dimensions : (Unit: um)

■ Physical Structure :

Chip dimension	Chip size	270 um x 270 um
	Thickness	225 um
	Emission area	245 um
	Bonding pad	105 um
Electrode	Top: P (anode)	Gold
	Backside: N (cathode)	Gold alloy
Surface condition	Frosted	

■ Electro-Optical Characteristics : (Ta = 25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F = 100 mA	-	1.34	1.50	V
		I_F = 200 mA	-	1.47	1.65	
Reverse Voltage	V_R	I_R = 10 uA	5	-	-	V
Wavelength	λ_P	I_F = 20 mA	930	945	960	nm
Spectral width at half height	$\triangle\lambda$	I_F = 20 mA	-	50	-	nm
Radiant Power	P_o	I_F = 20 mA	0.70	-	-	mW

※ ED-E12IRA is designed for electrical white-board. TASC suggests the cup depth of lead frame has to be less than 500um. Please evaluate the package design carefully and discuss with TASC if the design of cup depth has to over than 500um.

■ **Typical Electro-Optical Characteristics Curve:**

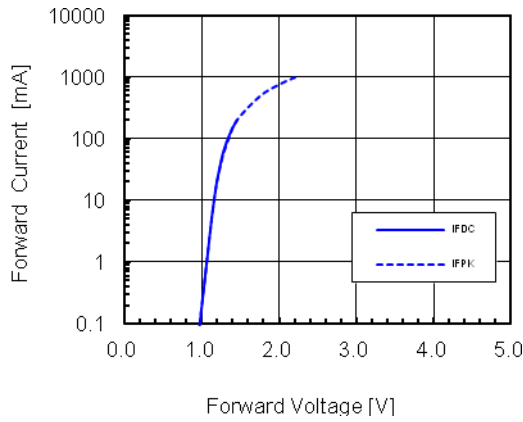Fig 1. Forward Current vs. DC Forward Voltage

Fig 2. Relative Radian Power vs. Wavelength
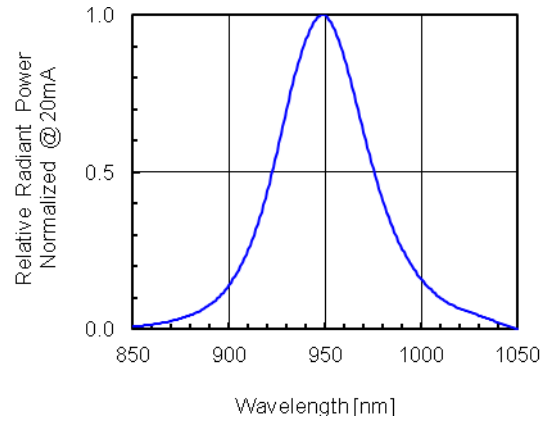
Fig 3. Relative Radiant Power
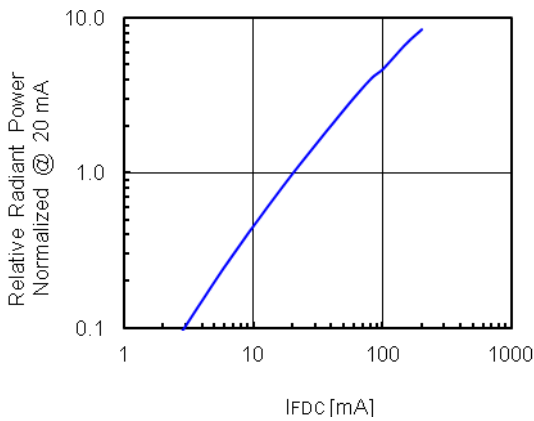   vs. Forward DC Current

Fig 4. Relative Radiant Power
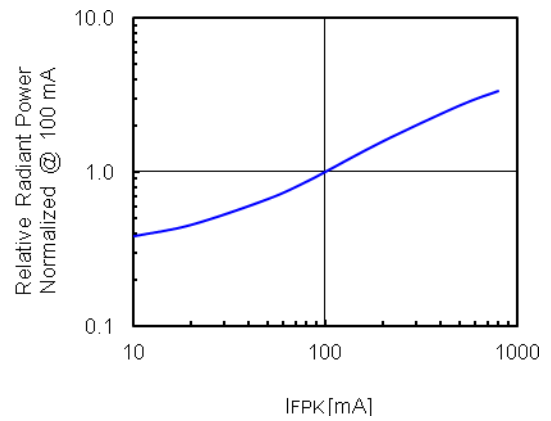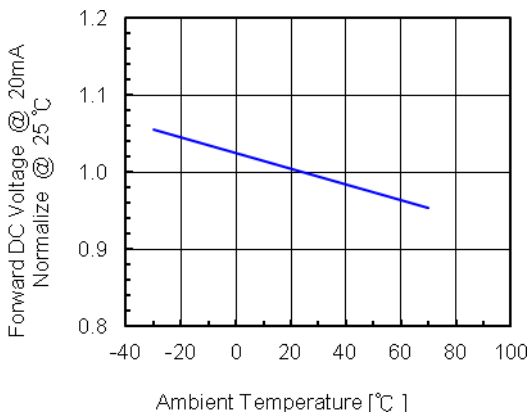   Vs. Forward Peak Current

Fig 5. Forward DC Voltage vs. Temperature

Fig 6. Relative Radiant Power vs. Temperature