

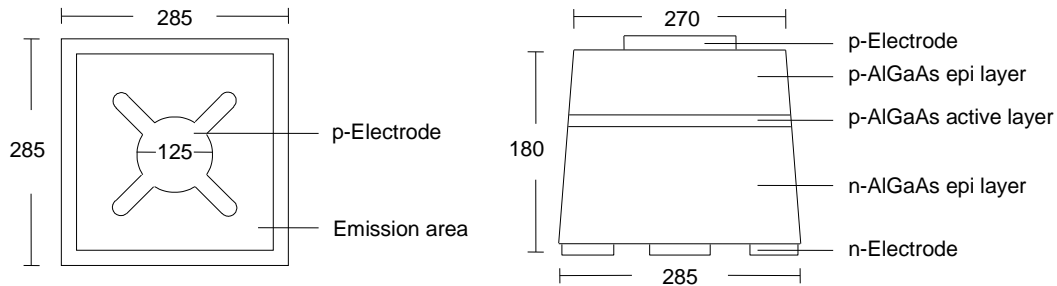
### ■ Features :

- AlGaAs/AlGaAs Wafer
- Very High Power
- High Performance
- Superior Thermal Stability

### ■ Typical Applications :

- IrDA
- Encoder
- Data Communication

### ■ Outline Dimensions : (Unit: $\mu\text{m}$ )



### ■ Physical Structure :

Chip dimension	Chip size	285 $\mu\text{m}$ x 285 $\mu\text{m}$
	Thickness	180 $\mu\text{m}$
	Emission area	270 $\mu\text{m}$
	Bonding pad	125 $\mu\text{m}$
Electrode	Top: P (anode)	Gold
	Backside: N (cathode)	Gold alloy
Surface condition	Smooth	

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 50 \text{ mA}$	-	1.75	2.00	V
		$I_F = 200 \text{ mA}$	-	2.45	3.00	
Reverse Voltage	$V_R$	$I_R = 10 \text{ uA}$	5	-	-	V
Wavelength	$\lambda_P$	$I_F = 50 \text{ mA}$	-	770	-	nm
Spectral width at half height	$\Delta\lambda$	$I_F = 50 \text{ mA}$	-	40	-	nm
Radiant Power	$P_o$	$I_F = 20 \text{ mA}$	1.20	2.00	-	mW
Rise / Fall Time	$t_r / t_f$	$I_F = 50 \text{ mA}$	-	15 / 10	-	ns

■ Typical Electro-Optical Characteristics Curve:

Fig 1. Forward Current vs. Forward Voltage

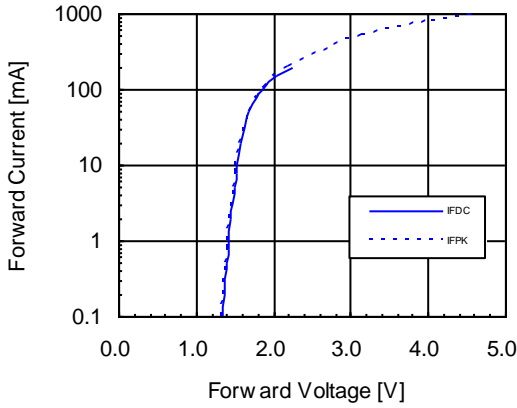


Fig 2. Relative Radiant Power vs. Forward Current

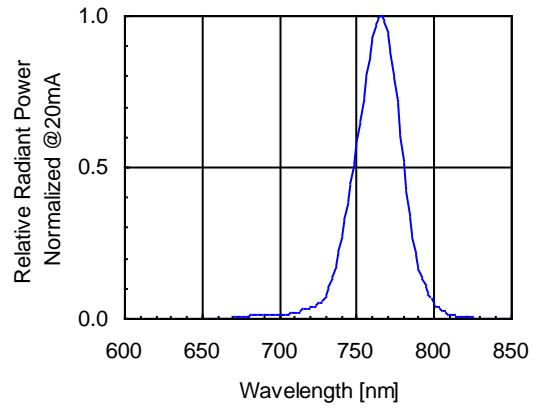


Fig 3. Relative Radiant Power vs. Forward DC Current

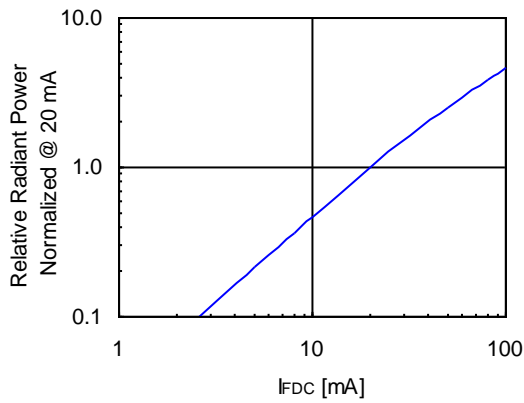


Fig 4. Relative Radiant Power vs. Forward Peak Current

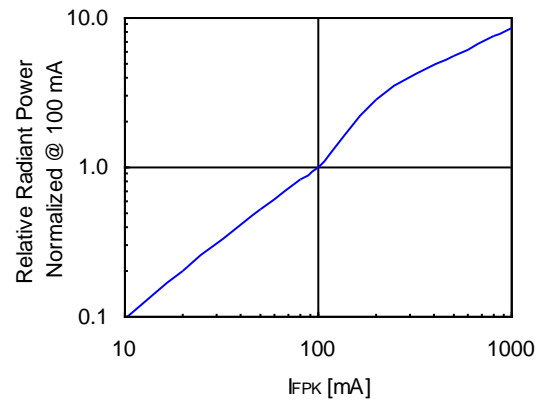


Fig 5. Forward DC Voltage vs. Temperature

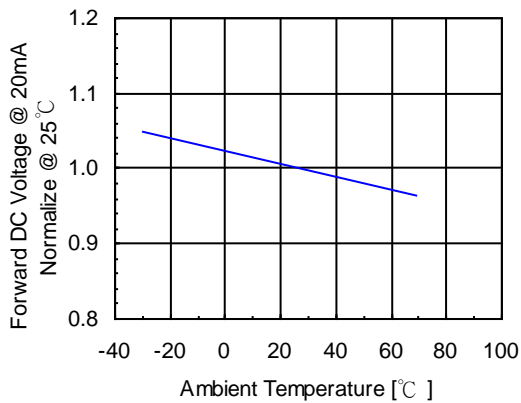


Fig 6. Relative Radiant Power vs. Temperature

