

Electro-optical Characteristics

($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Conditions	MIN.	TYP.	MAX.	Unit
*2 Collector current	PT481	$V_{CE} = 2\text{V}$ $E_e = 0.1\text{mW/cm}^2$	1.5	10	25	mA
	PT481F		0.9	-	27	mA
	PT483F1		1.5	-	4.0	mA
Collector dark current	I_{CEO}	$V_{CE} = 10\text{V}, E_e = 0$	-	-	10^{-6}	A
*2 Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = 2.5\text{mA}$ $E_e = 1\text{mW/cm}^2$	-	0.7	1.0	V
Peak emission wavelength	PT481	-	-	800	-	nm
	PT481F/PT483F1		-	860	-	nm
Response time	Rise time	$V_{CE} = 2\text{V}, I_c = 10\text{mA}$ $R_L = 100\Omega$	-	80	-	μs
	Fall time		-	70	-	μs

*2 E_e : Irradiance by CIE standard light source A (tungsten lamp)

Fig. 1 Collector Power Dissipation vs. Ambient Temperature

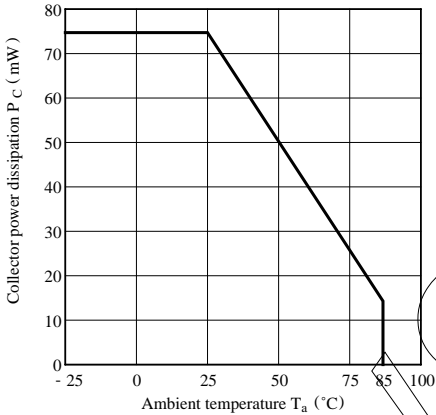


Fig. 2 Collector Dark Current vs. Ambient Temperature

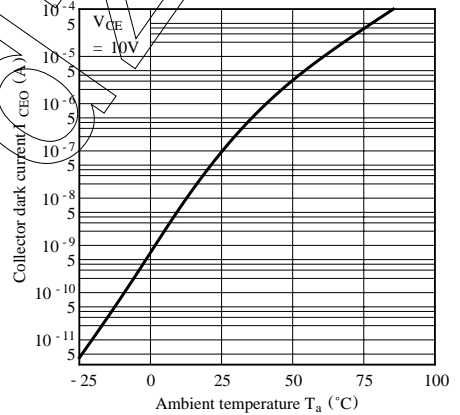


Fig. 3 Relative Collector Current vs. Ambient Temperature

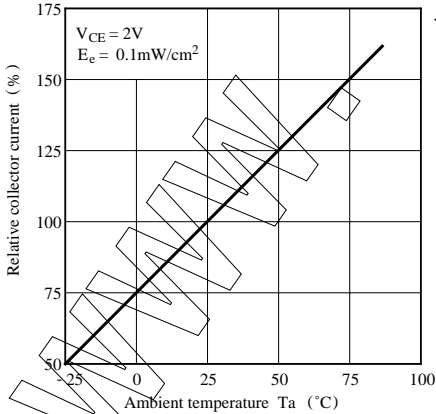


Fig.4-a Collector Current vs. Irradiance (PT481)

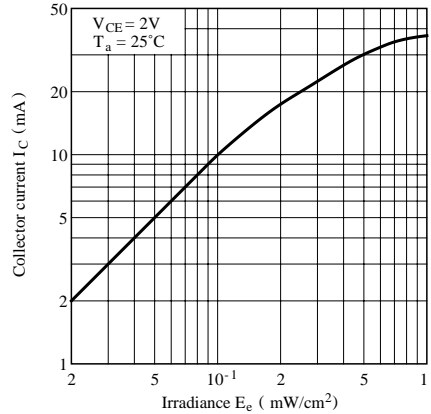


Fig.4-b Collector Current vs. Irradiance
(PT481F/PT483F1)

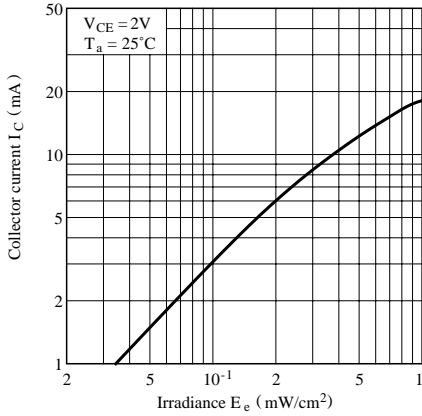


Fig.5-a Collector Current vs. Collector-emitter Voltage
(PT481)

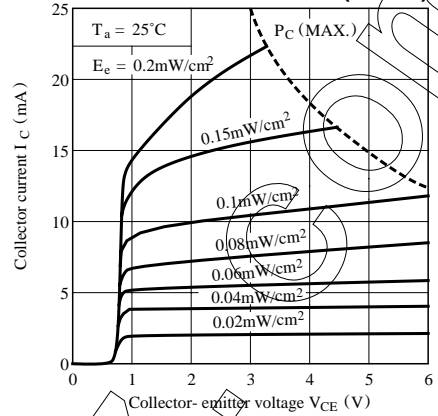


Fig.5-b Collector Current vs. Collector-emitter Voltage
(PT481F/PT483F1)

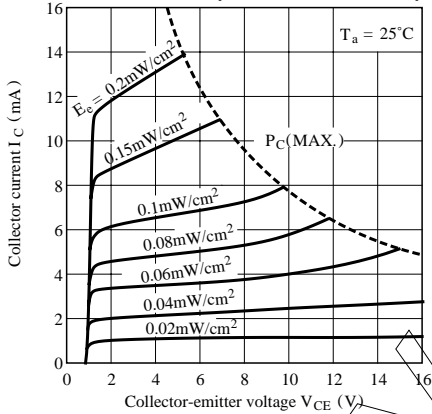


Fig. 6 Spectral Sensitivity

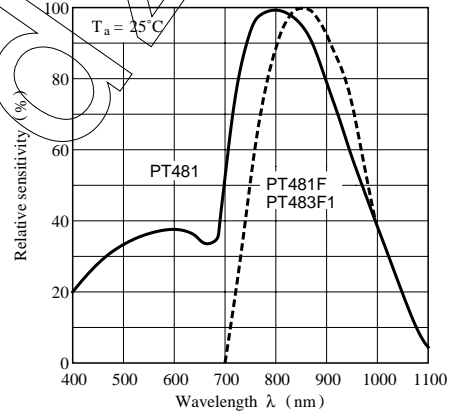
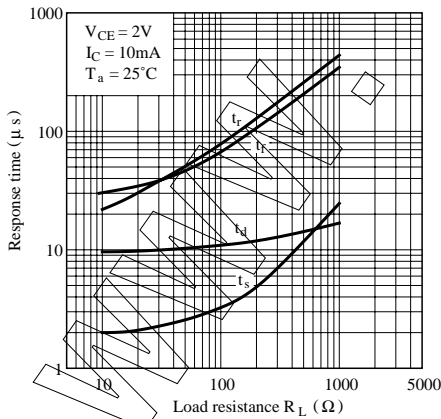


Fig. 7 Response Time vs. Load Resistance



Test Circuit for Response Time

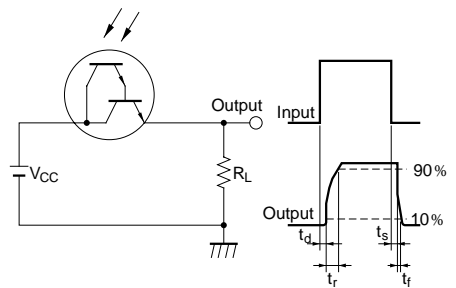


Fig. 8 Sensitivity Diagram

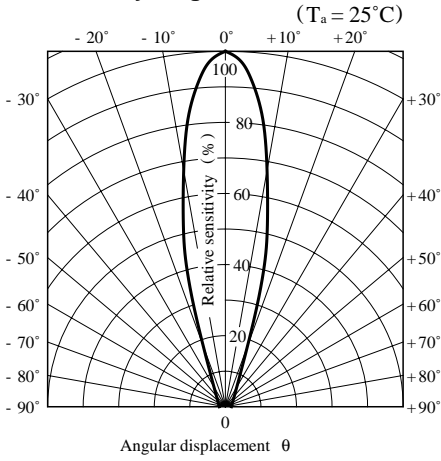


Fig.9-a Collector-emitter Saturation Voltage vs. Irradiance (PT481)

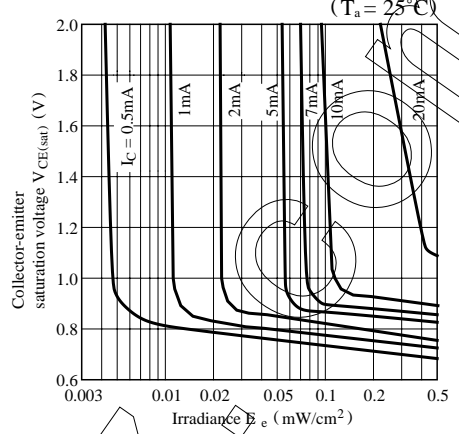


Fig.9-b Collector-emitter Saturation Voltage vs. Irradiance (PT481F/PT483F1)

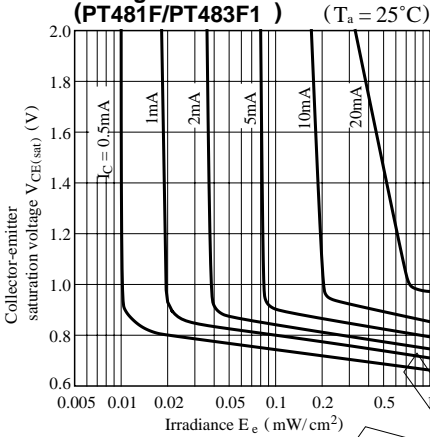
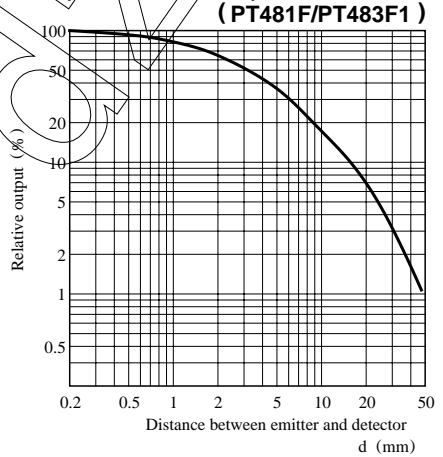


Fig.10 Relative Output vs. Distance (Emitter : GL480)



● Please refer to the chapter “Precautions for Use.”

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