

Photo Transistor

Features:

- High Reliability in Demanding Environments

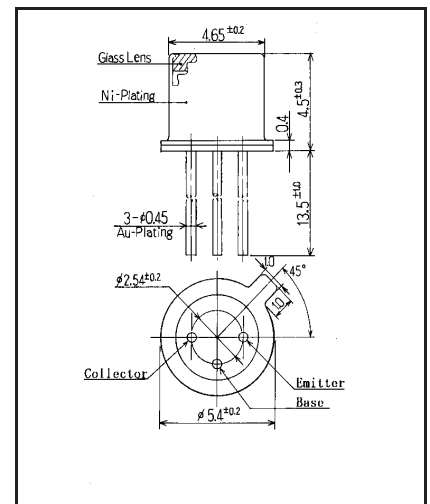
Applications:

- Optical Switches
- Optical Sensors
- Fiber Optic Communications
- Optical Detectors



Absolute Maximum Ratings (Ta=25°C)

Items	Symbol	Ratings	Unit
Collector-Emitter Voltage	V _{ceo}	30	V
Collector-Base Voltage	V _{cbo}	30	V
Emitter Base Voltage	V _{ebo}	5	V
Emitter Collector Voltage	V _{eco}	5	V
Collector Current	I _c	50	mA
Collector Power Dissipation	P _c	250	mW
Operating Temperature	T _{opr}	-30 ~ +100	°C
Storage Temperature	T _{stg}	-40 ~ +125	°C
Junction Temperature	T _j	125	°C
Lead Soldering Temp ^{*1}	T _{sol}	260	°C



*1: Time 5 Sec max, Position: Up to 3mm from the body.

Electrical & Optical Characteristics (Ta = 25°C)

Items	Symbol	Conditions	Min	Typ	Max	Unit
Collector Emitter Current	I _{cel}	V _{ce} =20V, E _e =0.5mW/cm ^{2*}	--	1.0	--	mA
Collector Dark Current	I _{ceo}	V _{ce} =20V, E _e =mW/cm ^{2*}	--	--	100	nA
C-E Saturation Voltage	V _{CE(sat)}	I _c =0.2mA, E _e =5mW/cm ^{2*}	--	0.2	--	V
Spectral Sensitivity	λ	--	--	400~1100	--	nm
Peak Sensitivity Wavelength	λ _p	--	--	880	--	nm
Switching time (Rise Time)	T _r	R _L =100Ω, V _{ce} =5V, I _c =0.5mA	--	10	--	μS
Switching time (Fall Time)	T _f	R _L =100Ω, V _{ce} =5V, I _c =0.5mA	--	10	--	μS
Angular Response	θ	--	--	±55	--	deg

*Color Temperature = 2870°K Standard Tungsten Lamp

Graphs:

