

3mm Round Phototransistor



Features:

- Standard 3mm Package
- High Sensitivity

Maximum Ratings at $T_A = 25^\circ\text{C}$

Power Dissipation	: 75mW
Collector-Emitter Voltage	: 30V
Emitter-Collector Voltage	: 5V
Operating Temperature Range	: -25°C to $+85^\circ\text{C}$
Storage Temperature Range	: -40°C to $+100^\circ\text{C}$
Soldering Temperature Dip Soldering	: 260°C for 5 secs
Soldering Temperature Hand Soldering	: 350°C for 3 secs

Electrical & Optical Characteristics at $T_A = 25^\circ\text{C}$

Chip		Collector-emitter breakdown voltage (V)	Emitter-collector breakdown voltage (V)	Collector-emitter saturation voltage (V)	Rise Time μS	Fall Time μS	Collector Dark Current (nA)	On State Collector Current (mA) min. typ.	Peak Sensitivity Wave-length
Material	Lens Colour	(Conditions: $E_e=0\text{mW}/\text{cm}^2$ $I_C=100\ \mu\text{A}$)	(Conditions: $E_e=0\text{mW}/\text{cm}^2$ $I_E=100\ \mu\text{A}$)	(Conditions: $E_e=1\text{mW}/\text{cm}^2$ $I_C=2\text{mA}$)	(Conditions: $V_{ce}=5\text{V}$, $I_c=1\text{mA}$, $R_L=1000$)	(Conditions: $E_e=0\text{mW}/\text{cm}^2$ $V_{ce}=20\text{V}$)	(Conditions: $E_e=1\text{mW}/\text{cm}^2$ $V_{ce}=5\text{V}$)		
Silicon	Black	30	5	0.3	15	15	100	0.6 2.0	860

Typical Electrical / Optical Characteristics Curves:

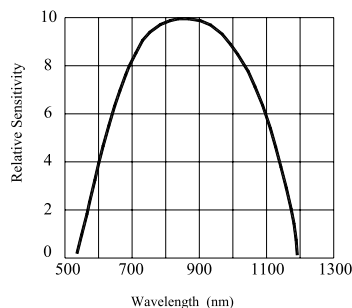


Fig. 1 Spectral Sensitivity VS. Peak Wavelength

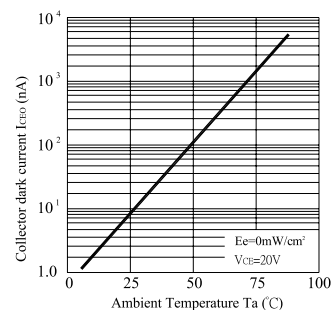


Fig. 2 Collector Dark Current VS. Ambient Temperature

3mm Round Phototransistor

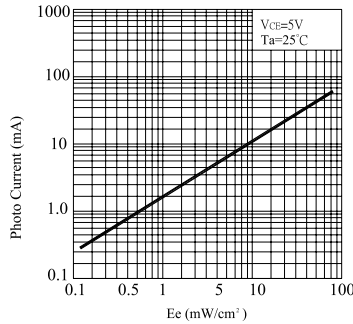


Fig. 3 Photo Current VS. Irradiance

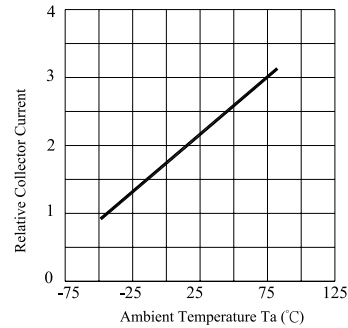
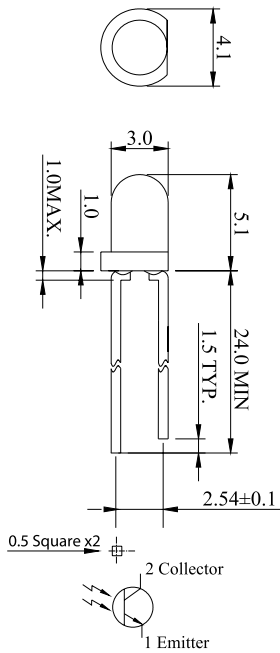


Fig. 4 Collector Current VS. Ambient Temperature

Diagram:



Dimensions : Millimetres
Tolerance of ±0.25mm

Part Number Table

Description	Part Number
3mm Round Phototransistor	OFT-3301

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