

T-41-61

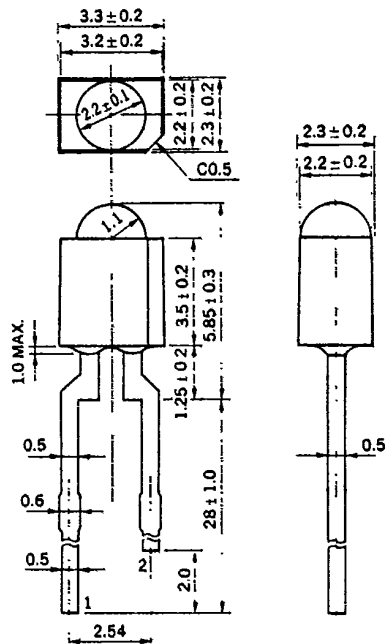
PHOTO TRANSISTOR PH110

PHOTO TRANSISTOR

DESCRIPTION

The PH110 is a photo transistor in a plastic molded package, and very suitable for a detector of an optical switch with combination of the SE310.

PACKAGE DIMENSIONS in millimeters



1. Emitter
2. Collector

FEATURES

- Small size plastic molded package.
- High Sensitivity.
- Spectrally matched to GaAs infrared emitter.

APPLICATION

- Photo Sensor for optical switches.
- Optical encoder.
- High speed Optoelectronic Data Links.

ABSOLUTE MAXIMUM RATINGS (T_a=25 °C)

Collector to Emitter Voltage	V _{CEO}	30	V
Collector Current	I _C	40	mA
Power Dissipation	P _C	100	mW
Junction Temperature	T _j	100	°C
Storage Temperature	T _{stg}	-40 to +100	°C

ELECTRICAL CHARACTERISTICS (T_a=25 °C)

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
Collector to Emitter Dark Current	I _{CEO}			100	nA	V _{CE} =10 V, H=0 μW/cm ²
Collector Saturation Voltage	V _{CE(sat)}			0.3	V	I _C =50 μA, H=500 μW/cm ² *
Photo Current	I _L	200	400		μA	V _{CE} =5 V, H=50 μW/cm ² *
Fall Time	t _f		20		μs	V _{CC} =10 V, H=50 μW/cm ² , R _L =1 kΩ

* Measured with a GaAs infrared emitter with λ_p=940 nm.

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

