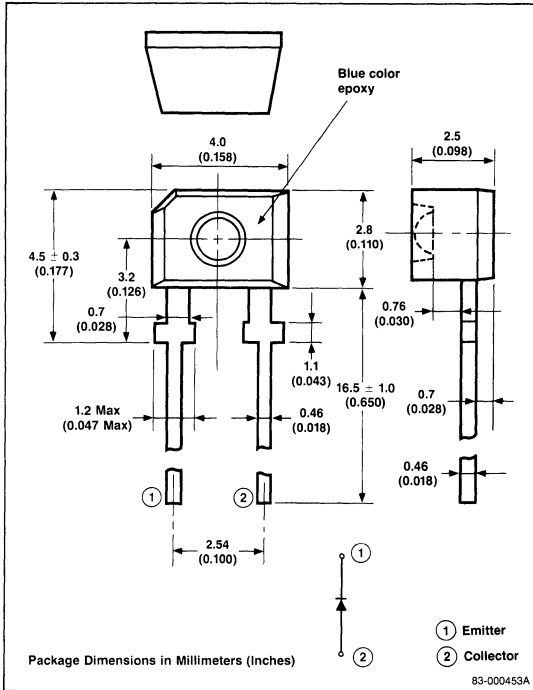


### Description

The PH108 is a highly sensitive photo transistor in a small plastic molded package and is suitable as a detector of a photo interrupter.

### Package Dimensions



### Absolute Maximum Ratings

$T_A = +25^\circ\text{C}$	
Collector-Emitter Voltage, $V_{CE0}$	30V
Collector Current, $I_C$	40mA
Power Dissipation, $P_D$	100mW
Junction Temperature, $T_J$	100°C
Operating Temperature, $T_{OPT}$	-20°C ~ +80°C
Storage Temperature, $T_{STG}$	-40°C ~ +100°C

### Electrical Characteristics

Parameters	Symbol	Limits			Unit	Test Conditions
		Min	Typ	Max		
Dark Current	$I_{CEO}$			100	nA	$V_{CE} = 10V$ , $H = 0mW/cm^2$
Collector Saturation Voltage	$V_{CE(sat)}$			0.3	V	$I_C = 0.5mA$ , $H = 5mW/cm^2$
Photo Current	$I_L$	0.3	0.9		mA	$V_{CE} = 5V$ , $H = 0.5mW/cm^2$
Rise and Fall Time	$t_r, t_f$			40	$\mu$	$V_{CC} = 10V$ , $H = 0.5mW/cm^2$ , $R_L = 1.0k\Omega$
50% Response Angle	$I_{L0}/2$		15		°C	Between 50% sensitivity points

Note: \*When exposed to infrared light of wavelength  $\lambda_p = 940nm$ .

Typical Characteristics

T<sub>A</sub> = +25°C

