

Phototransistor 3mm

HP-9748

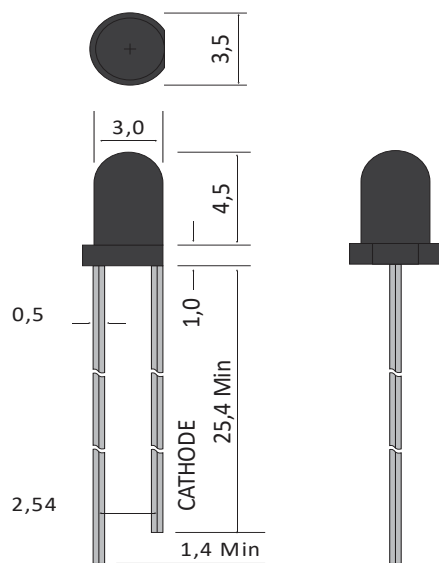


Illustrative picture

FEATURES

- Package form: 3mm round type
- Lens color: black transparent
- Mounting style: through-hole
- Leads with stand-off
- High radiant sensitivity
- Large bandwidth

Package configuration



All dimensions are in millimeters

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

Parameter	Test Condition	Symbol	Value	Unit.
Reverse voltage	-	V_R	30	V
Power dissipation	$T_{amb} \leq 25^\circ\text{C}$	P_V	75	mW
Operation / Storage Temperature range	-	T_{amb} / T_{stg}	-40 to +100	$^\circ\text{C}$

Electrical and optical characteristics ($T_a=25^\circ\text{C}$)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit.
Collector emitter breakdown voltage	$I_C = 100 \mu\text{A}$, $E_e = 0\text{mW}/\text{cm}^2$	$V_{B_{CEO}}$	30	-	-	V
Emitter Collector breakdown voltage	$I_E = 100 \mu\text{A}$, $E_e = 0\text{mW}/\text{cm}^2$	$V_{B_{ECO}}$	5	-	-	V
Collector emitter dark current	$E_e = 0\text{mW}/\text{cm}^2$, $V_{CE} = 20\text{V}$	I_{CEO}	-	-	100	nA
Collector emitter saturation voltage	$I_C = 2\text{mA}$, $E_e = 1\text{mW}/\text{cm}^2$	V_{CE-SAT}	0	0	0.4	V
Collector light current	$E_e = 1\text{mW}/\text{cm}^2$, $V_{CE} = 5\text{V}$	$I_{C(ON)}$	0.7	2.5	-	mA
Angle of half sensitivity	-	ϕ	-	± 30	-	deg.
Peak sensitivity wavelength	-	λ_p	-	940	-	nm
Spectral sensivity	-	λ	380	-	1080	nm
Switching Time (Fall / Rise)	$V_{CE} = 5\text{V}$, $I_C = 0.5\text{mA}$, $R_L = 100\Omega$	-	-	10	-	μs