



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089

NTE3120 Silicon NPN Phototransistor Detector

Features:

- High Sensitivity
- GaAs LED–Wide Spectral Range, with GaAs LED.
- Low Dark Current
- Side–View Plastic Package

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

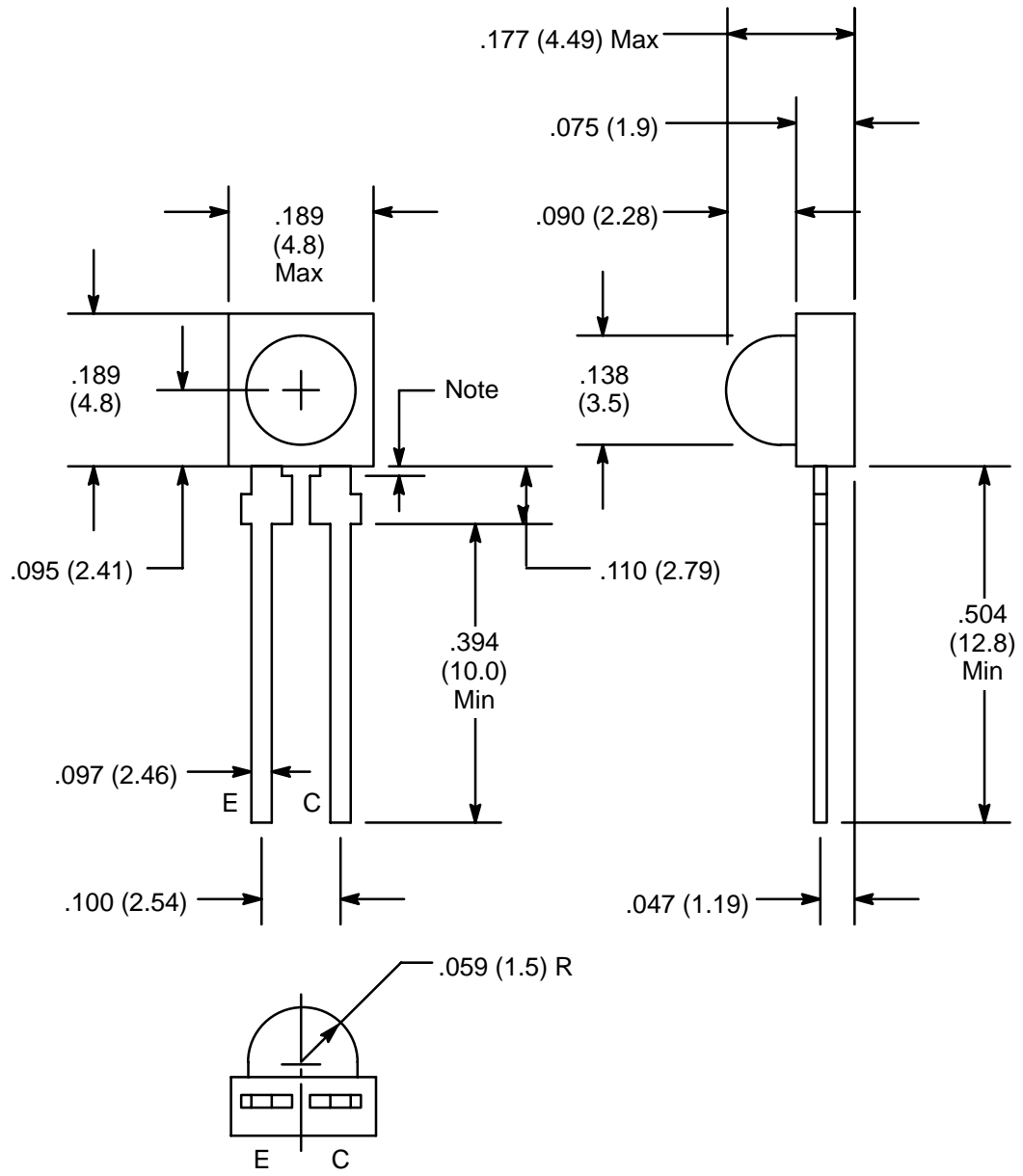
Collector–Emitter Voltage, V_{CE0}	20V
Emitter–Collector Voltage, V_{ECO}	5V
Collector Current, I_C	20mA
Collector Dissipation P_C	100mW
Operating Temperature Range, T_{opr}	-25° to $+85^\circ\text{C}$
Storage Temperature Range, T_{stg}	-30° to $+100^\circ\text{C}$

Electro–Optical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Dark Current	I_{CEO}	$V_{CE} = 10V$	–	0.01	1.0	μA
Photo Current	$I_{CE(L)}$	$V_{CE} = 10V, L = 500 \text{ 1x, Note 1}$	1	3	–	mA
Peak Sensitivity Wavelength	λ_P	$V_{CE} = 10V$	–	800	–	nm
Acceptance Half Angle	θ	Note 2	–	35	–	deg
Rise Time	t_r	$V_{CC} = 10V, I_{CE(L)} = 5mA,$ $R_L = 100\Omega$	–	4	10	μs
Fall Time	t_f		–	4	10	μs
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_{CE(L)} = 1mA, L = 1000 \text{ 1x, Note 1}$	–	0.2	0.5	V

Note 1. Source: Tungsten 2856 °K.

Note 2. The angle when the light current is halved.



Note: Not Soldered