ELECTRONICS, INC.
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NTE2431
Silicon PNP Transistor
High Voltage Amp/Switch
(Compl to NTE2430)

Description:

The NTE2431 is a silicon PNP transistor in a SOT–89 type surface mount package designed for use in amplifier and switching switching applications.

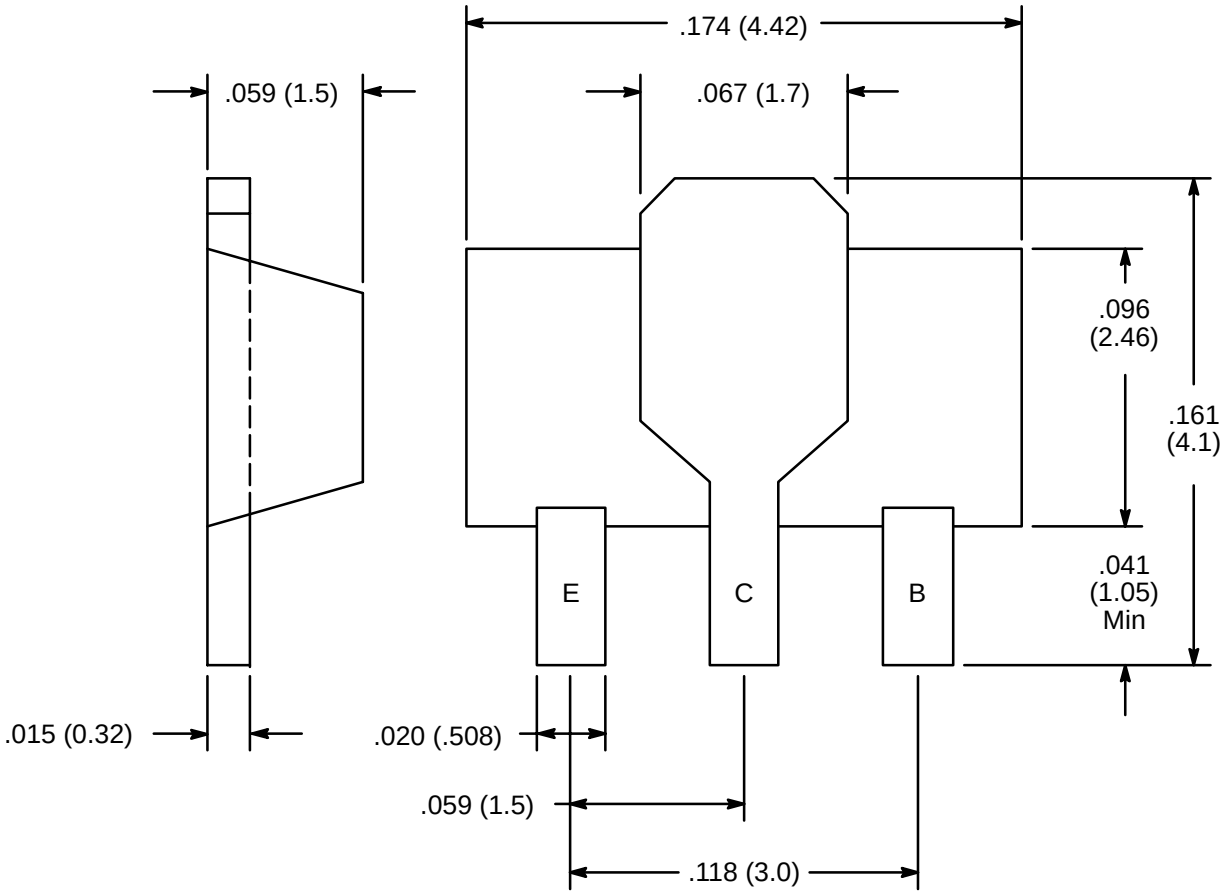
Absolute Maximum Ratings:

Collector–Base Voltage (Open Emitter), V_{CBO} 350V
Collector–Emitter Voltage (Open Base), V_{CEO} 300V
Emitter–Base Voltage (Open Collector), V_{EBO} 6V
DC Collector Current, I_C 1A
Base Current, I_B 500mA
Total Power Dissipation ($T_A \le +25°C$, Note 1), P_{tot} 1W
Operating Junction Temperature, T_J . . . . . +150°C
Storage Temperature Range, T_{stg} . . . . . –65° to +150°C
Thermal Resistance, Junction–to–Ambient (Note 1), R_{thJA} 125K/W
Thermal Resistance, Junction–to–Tab, R_{thJTAB} 10K/W

Note 1. Device mounted on a ceramic substrate; area = 2.5cm^2, thickness = 0.7mm.

Electrical Characteristics: (T_J = +25°C unles otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 280V, I_E = 0	–	–	1	µA
	I_{CEO}	V_{CE} = 250V, I_B = 0	–	–	50	µA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 6V, I_C = 0	–	–	20	µA
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 50mA, I_B = 0, L = 25mH	300	–	–	V
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 50mA, I_B = 5mA	–	–	2	V
DC Current Gain	h_{FE}	V_{CE} = 10V, I_C = 50mA	30	–	120	
Collector Capacitance	C_c	$I_E = I_e$ = 0, V_{CB} = 10, f = 1MHz	–	–	15	pF
Transitional Frequency	f_T	V_{CE} = 10V, I_C = 10mA, f = 30MHz	15	–	–	MHz


.174 (4.42)
.059 (1.5)
.067 (1.7)
.096
(2.46)
.161
(4.1)
E
C
B
.041
(1.05)
Min
.015 (0.32)
.020 (.508)
.059 (1.5)
.118 (3.0)

Bottom View