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

NTE2430
Silicon NPN Transistor
High Voltage Amp/Switch
(Compl to NTE2431)

Description:

The NTE2430 is a silicon NPN transistor in a SOT–89 type surface mount package designed for use in amplifier and switching switching applications.

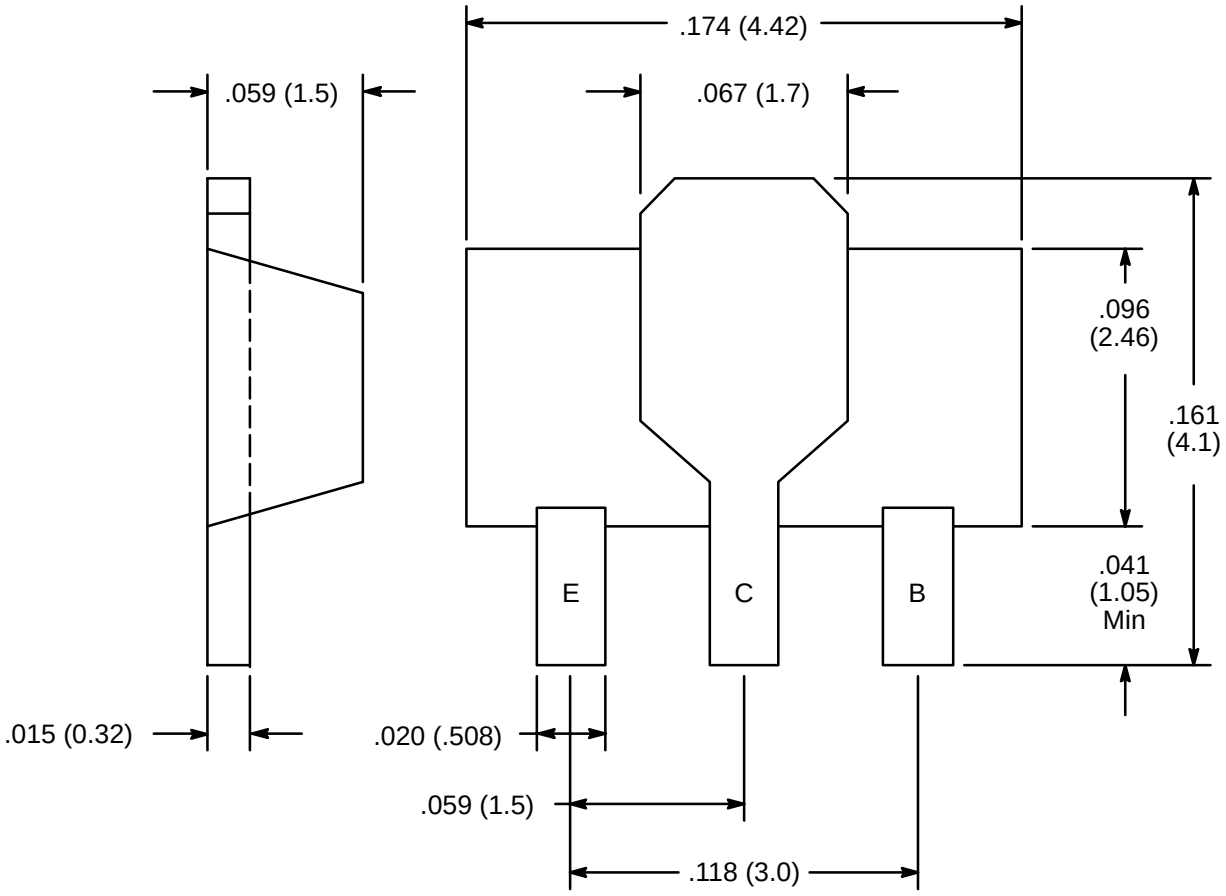
Absolute Maximum Ratings:

Collector–Base Voltage (Open Emitter), V_{CBO} 400V
Collector–Emitter Voltage (Open Base), V_{CEO} 350V
Emitter–Base Voltage (Open Collector), V_{EBO} 5V
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

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_{CES}	V_{CE} = 300V, I_B = 0	–	–	20	nA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 5V, I_C = 0	–	–	10	µA
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 50mA, I_B = 4mA	–	–	500	mV
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 50mA, I_B = 4mA	–	–	1.3	V
DC Current Gain	h_{FE}	V_{CE} = 10V, I_C = 20mA	40	–	–	
Collector Capacitance	C_c	$I_E = I_e$ = 0, V_{CB} = 10, f = 1MHz	–	–	2	pF
Transitional Frequency	f_T	V_{CE} = 10V, I_C = 10mA, f = 5MHz	70	–	–	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