



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.

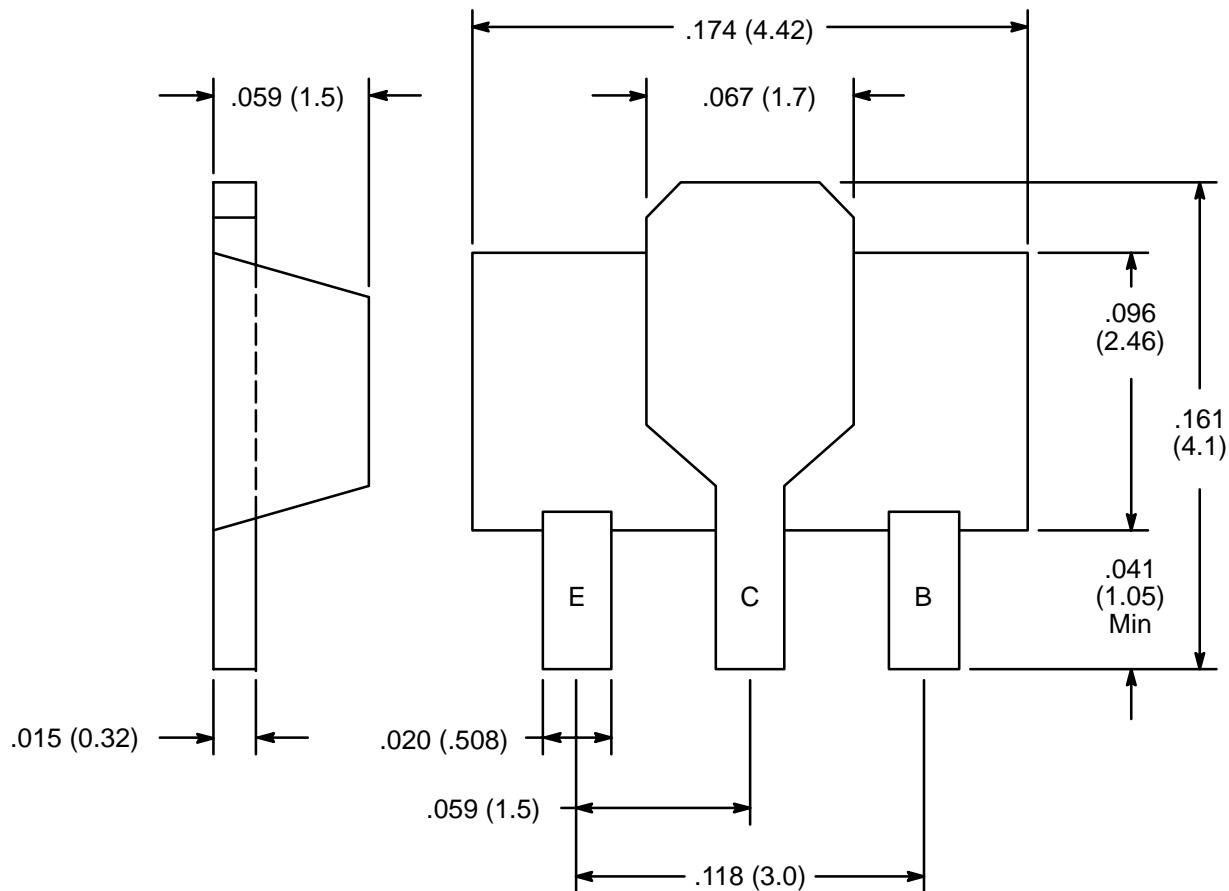
Absolute Maximum Ratings:

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 ($T_A \leq +25^\circ\text{C}$, 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 = 2.5cm², thickness = 0.7mm.

Electrical Characteristics: ($T_J = +25^\circ\text{C}$ unless otherwise specified)

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



Bottom View