

NTE2310 Silicon NPN Transistor High Voltage, High Speed Switch

Description:

The NTE2310 is a silicon multiepitaxial mesa NPN transistor in a TO218 type package designed for use in high voltage, fast switching industrial applications.

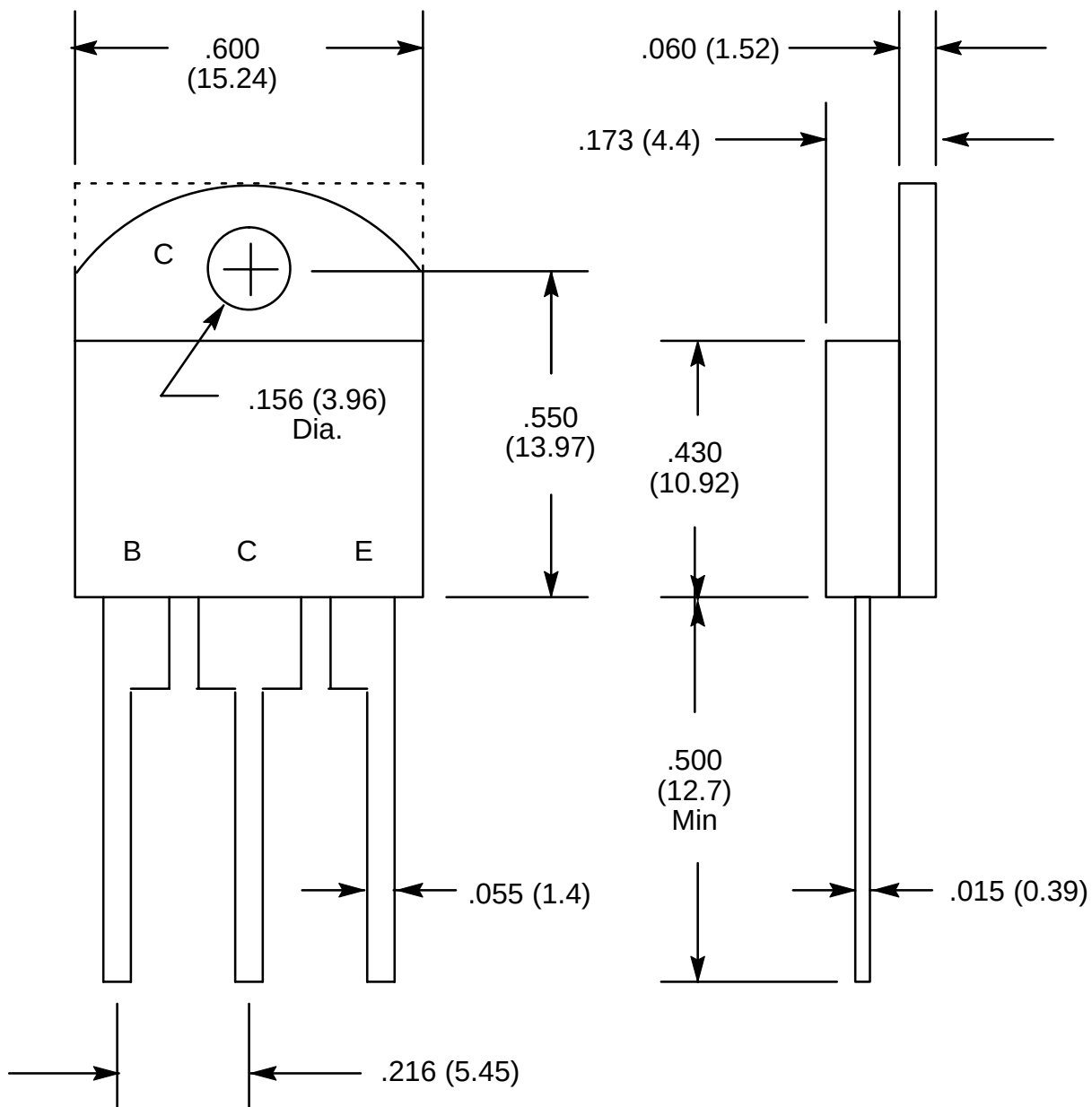
Absolute Maximum Ratings:

Collector–Emitter Voltage ($V_{BE} = 0$), V_{CES} 1000V
 Collector–Emitter Voltage ($I_B = 0$), V_{CEO} 450V
 Collector Current, I_C
 Continuous 8A
 Peak ($t_p \leq 2ms$) 20A
 Base Current, I_B
 Continuous 4A
 Peak ($t_p \leq 2ms$) 6A
 Power Dissipation ($T_C = +25^\circ C$), P_D 125W
 Operating Junction Temperature, T_J $+175^\circ C$
 Storage Temperature Range, T_{stg} -65° to $+175^\circ C$
 Thermal Resistance, Junction–to–Case, R_{thJC} $1.2^\circ C/W$

Electrical Characteristics: ($T_C = +25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector–Emitter Sustaining Voltage	$V_{CEO(sus)}$	$I_C = 100mA$, $L = 25mH$, Note 1	400	–	–	V
Collector Cutoff Current	I_{CES}	$V_{CE} = 1000V$, $V_{BE} = 0$	–	–	1	mA
		$V_{CE} = 1000V$, $V_{BE} = 0$, $T_C = +125^\circ C$	–	–	3	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 9V$, $I_C = 0$	–	–	10	mA
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 6A$, $I_B = 1.2A$, Note 1	–	–	1.5	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 6A$, $I_B = 1.2A$, Note 1	–	–	1.5	V
Turn–On Time	t_{on}	$I_C = 6A$, $I_{B1} = 1.2A$, $I_{B2} = 1.2A$	–	–	1	μs
Storage Time	t_s		–	–	4	μs
Fall Time	t_f		–	–	0.8	μs

Note 1. Pulse Test: Pulse Width = $300\mu s$, Duty Cycle = 1.5%.



NOTE: Dotted line indicates that case may have square corners