

NTE2593 Silicon NPN Transistor High Voltage Amp/Switch

Features:

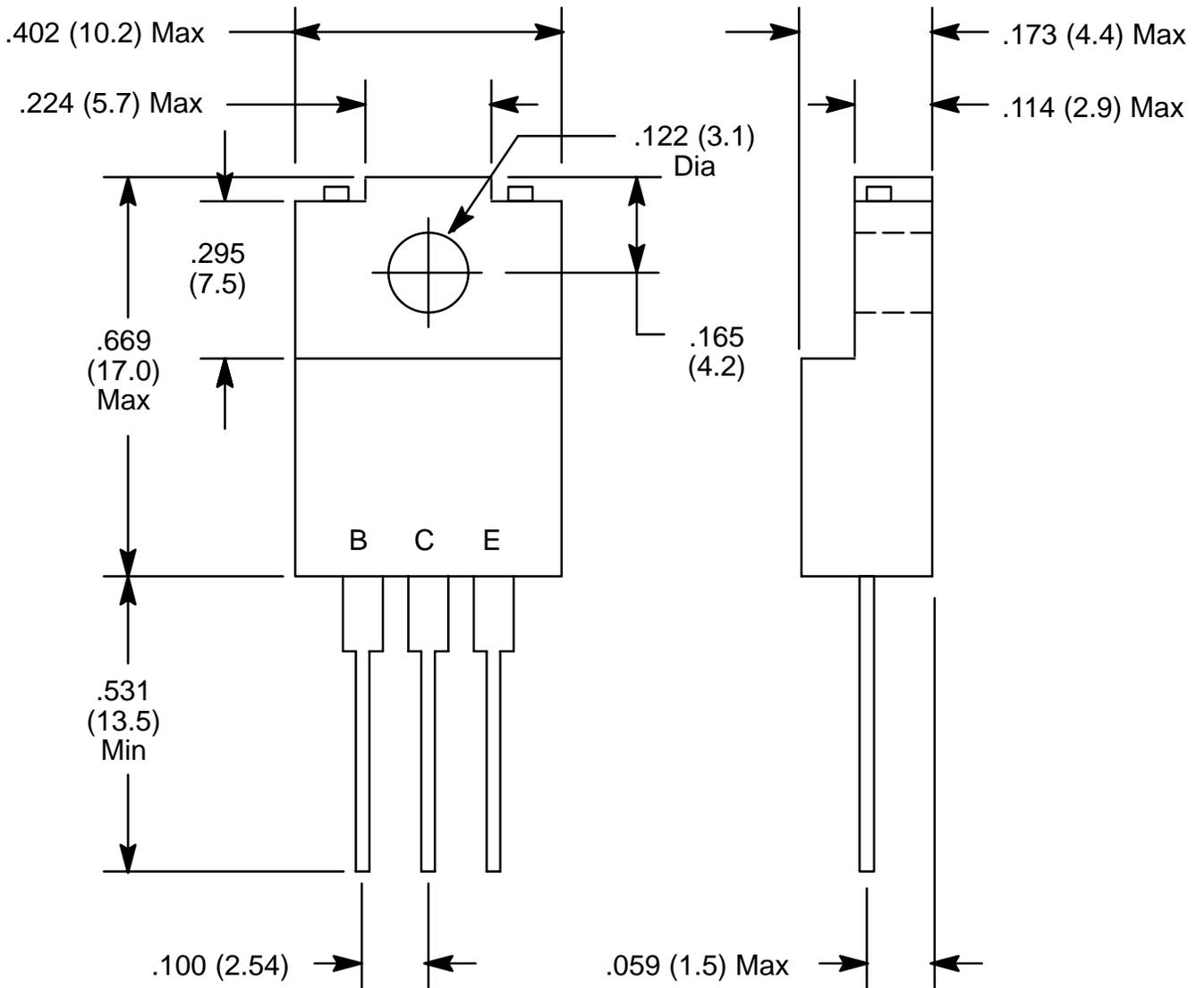
- High Breakdown Voltage: $V_{(BR)CEO} = 2100V$ Min
- Low Output Capacitance
- Wide ASO Range
- Isolated TO220 Type Package

Absolute Maximum Ratings: ($T_C = +25^\circ C$ unless otherwise specified)

Collector–Base Voltage, V_{CBO}	2100V
Collector–Emitter Voltage, V_{CEO}	2100V
Emitter–Base Voltage, V_{EBO}	5V
Collector Current, I_C	
Continuous	10mA
Peak	30mA
Collector Power Dissipation, P_C	2W
Operating Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	–55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 2100V, I_E = 0$	–	–	1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V, I_C = 0$	–		1	μA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 500\mu A$	10	–	60	
Gain Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 500\mu A$	–	6	–	MHz
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 1mA, I_B = 200\mu A$	–	–	5	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 1A, I_B = 200\mu A$	–	–	2	V
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	2100	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 100\mu A, R_{BE} = \infty$	2100	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	5	–	–	V
Output Capacitance	C_{ob}	$V_{CB} = 100V, f = 1MHz$	–	1.3	–	pF



NOTE: Tab is isolated