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

NTE2590
Silicon NPN Transistor
High Voltage Amp/Switch

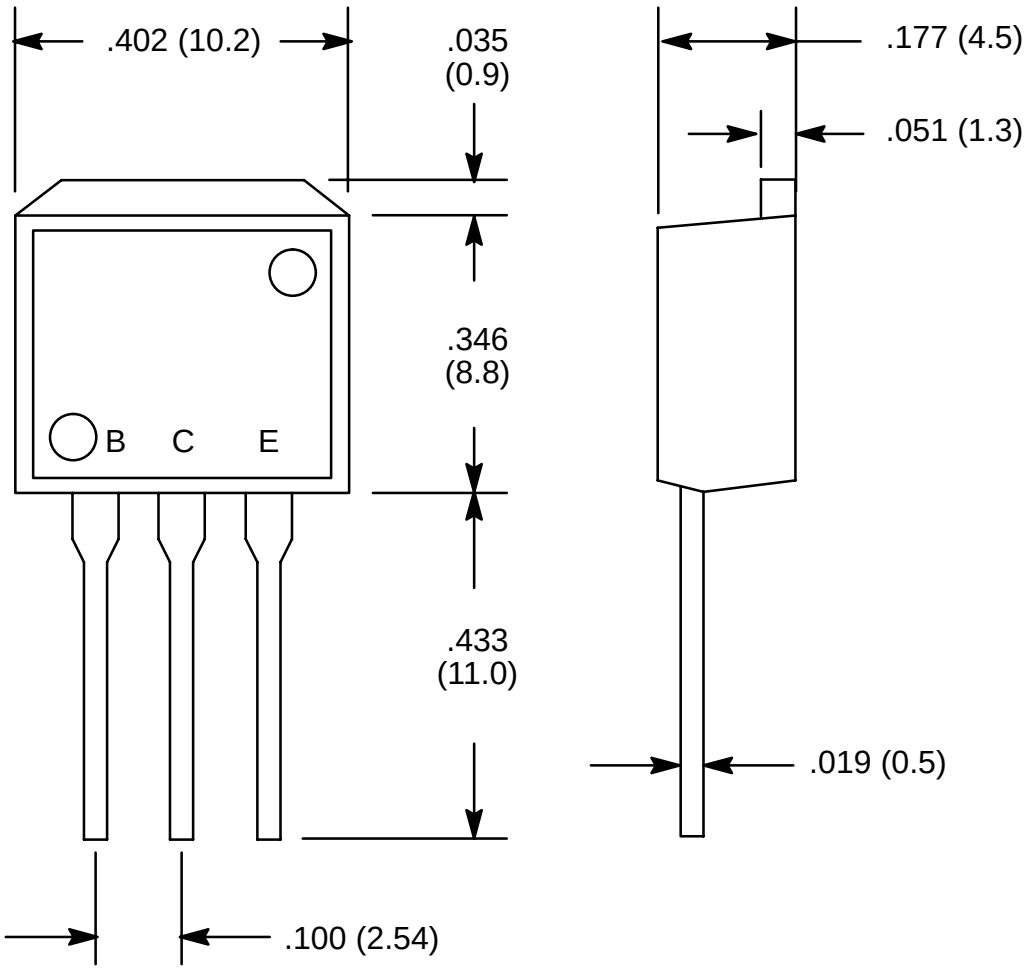
Features:
- High Breakdown Voltage, High Reliability
- Low Output Capacitance
- Wide ASO Range

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Collector–Base Voltage, V_{CBO} 1700V
Collector–Emitter Voltage, V_{CEO} 900V
Emitter–Base Voltage, V_{EBO} 5V
Collector Current, I_C
Continuous 50mA
Peak 150mA
Collector Power Dissipation, P_C 1.2W
Operating Junction Temperature, T_J . . . . . +150°C
Storage Temperature Range, T_{stg} . . . . . –55° to +150°C

Electrical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 900V, I_E = 0	–	–	1.0	µA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 4V, I_C = 0	–	–	1.0	µA
DC Current Gain	h_{FE}	V_{CE} = 5V, I_C =2mA	20	50	120	
Gain–Bandwidth Product	f_T	V_{CE} = 10V, I_C = 2mA	–	6	–	MHz
Output Capacitance	C_{ob}	V_{CB} = 100V, f = 1MHz	–	2.0	–	pF
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 5mA, I_B = 1mA	–	–	5	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	I_C =5A, I_B = 1mA	–	–	2	V
Collector Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 1mA, I_E = 0	1700	–	–	V
Collector Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 1mA, R_{BE} = ∞	900	–	–	V
Emitter Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 1mA, I_C = 0	5	–	–	V


.402 (10.2)
.035
(0.9)
.346
(8.8)
.433
(11.0)
B
C
E
.100 (2.54)
.177 (4.5)
.051 (1.3)
.019 (0.5)