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

NTE2337
Silicon NPN Transistor
High Speed Switch

Features:

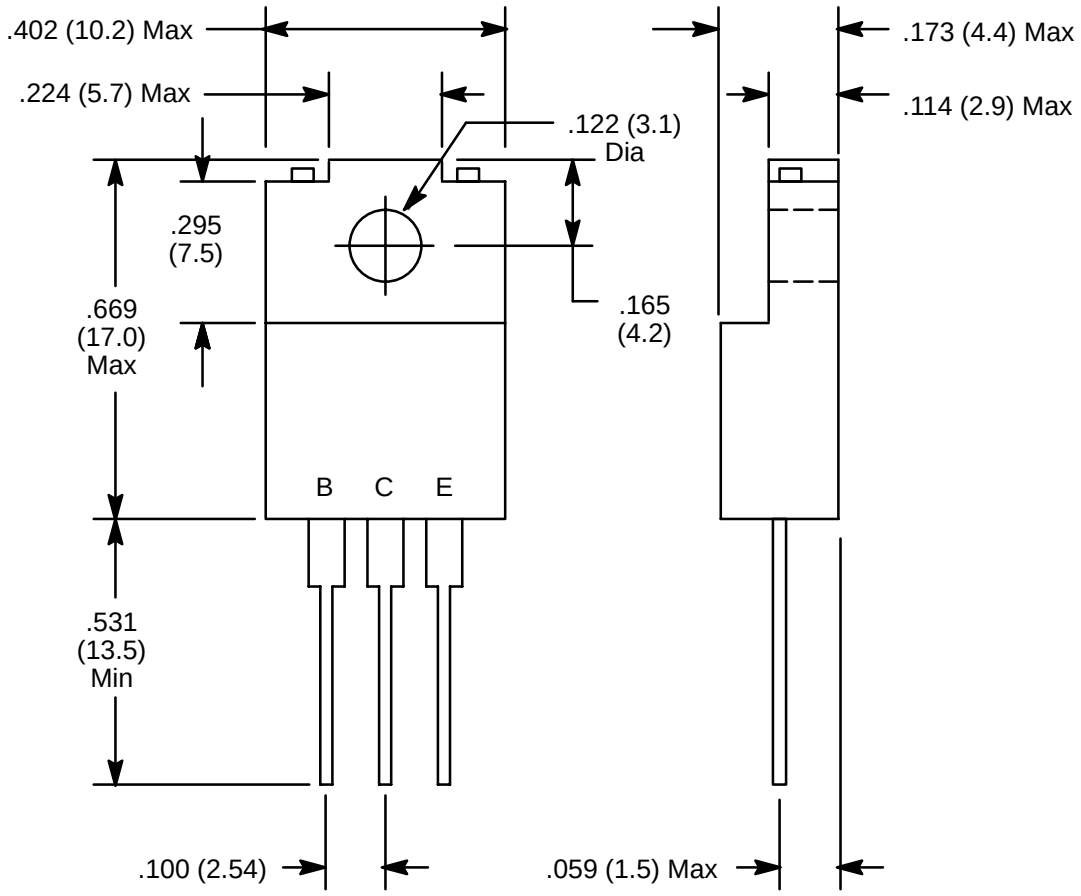
- High Collector–Base Voltage (V_{CBO})
- Wide Area of Safety Operation (ASO)
- Good Linearity of DC Current Gain (h_{FE})

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

Collector–Base Voltage, V_{CBO} 900V
Collector Emitter Voltage, V_{CES} 900V
Collector–Emitter Voltage, V_{CEO} 500V
Emitter Base Voltage, V_{EBO} 8V
Peak Collector Current, I_{CP} 15A
Collector Current, I_C 7A
Base Current, I_B 4A
Collector Power Dissipation, P_C
T_C = +25°C 45W
T_A = +25°C 2W
Operating Junction Temperature, T_J . . . . . +150°C
Storage Temperature Range, T_{stg} . . . . . –55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 900V, I_E = 0	–	–	100	µA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 5V, I_C = 0	–		100	µA
Collector Emitter Voltage	V_{CEO}	I_C = 10mA, I_B = 0	500	–	–	V
DC Current Gain	h_{FE1}	V_{CE} = 5V, I_C = 0.1A	15	–	–	
	h_{FE2}	V_{CE} = 5V, I_C = 4A	8	–	–	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 4A, I_B = 0.8A	–	–	1.0	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 4A, I_B = 0.8A	–	–	1.5	V
Transition Frequency	f_T	V_{CE} = 10V, I_C = 0.5A, f = 1MHz	–	20	–	MHz
Turn–On Time	t_{on}	I_C = 4A, I_{B1} = 0.8A, I_{B2} = –1.6A, V_{CC} = 200V	–	–	1.0	µs
Storage Time	t_{stg}		–	–	3.0	µs
Collector Current Fall Time	t_f		–	–	0.3	µs



NOTE: Tab is isolated