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

NTE2566 (NPN) & NTE2567 (PNP)
Silicon Complementary Transistors
High Current, High Speed Switch

Features:

- Low Saturation Voltage
- Fast Switching Speed
- Isolated TO220 Type Package

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

Collector–Base Voltage, V_{CBO} 60V

Collector–Emitter Voltage, V_{CEO} 50V

Emitter–Base Voltage, V_{EBO} 6V

Collector Current, I_C

- Continuous 12A
- Peak 15A

Collector Power Dissipation, P_C

- T_C = +25°C 30W
- T_A = +25°C 2W

Operating Junction Temperature, T_J . . . . . +150°C

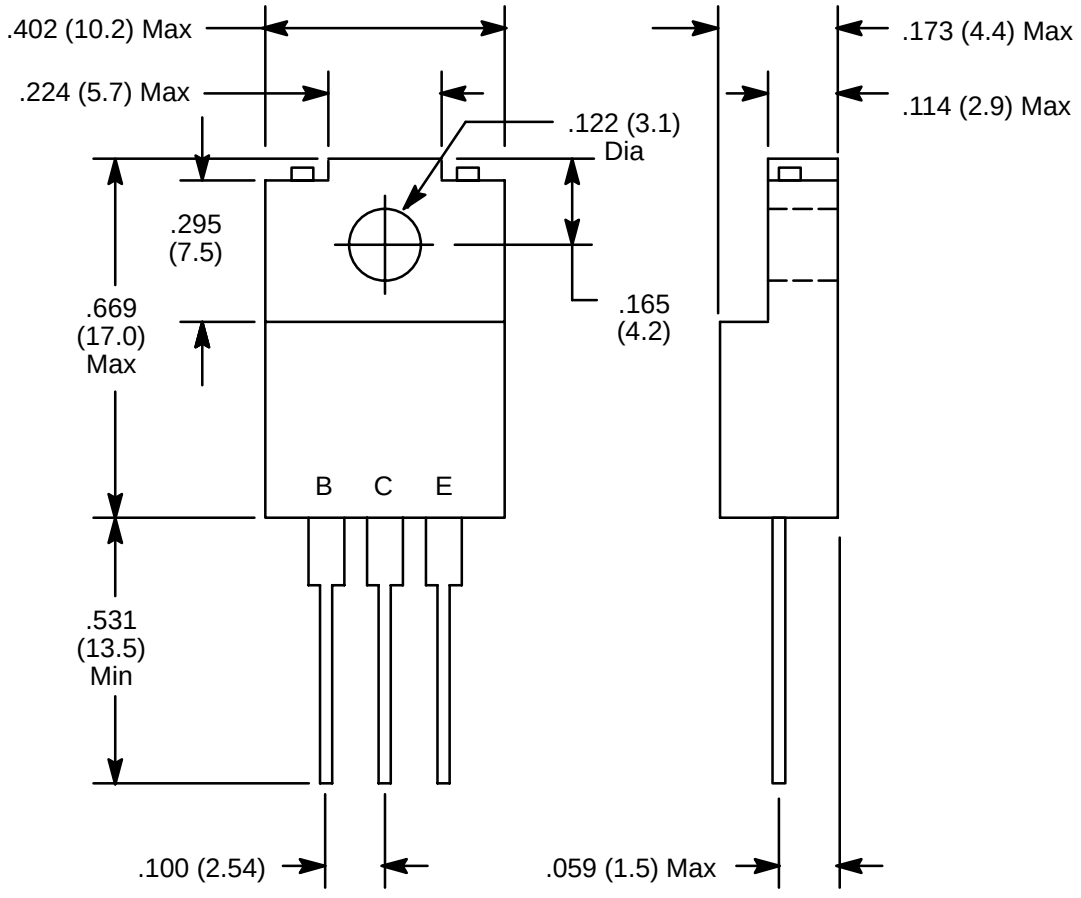
Storage Temperature Range, T_{stg} . . . . . –55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 40V, I_E = 0	–	–	0.1	mA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 4V, I_C = 0	–		0.1	mA
DC Current Gain	h_{FE}	V_{CE} = 2V, I_C = 1A	100	–	200	
		V_{CE} = 2V, I_C = 5A	30	–	–	
Gain Bandwidth Product	f_T	V_{CE} = 5V, I_C = 1A	–	10	–	MHz
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 6A, I_B = 0.6A	–	–	0.4	V
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 1mA, I_E = 0	60	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 1mA, R_{BE} = ∞	50	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 1mA, I_C = 0	6	–	–	V

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn–On Time NTE2566	t_{on}	I_C = 5A, I_{B1} = 20A, I_{B2} = –20A, V_{CC} = 20V, Pulse Width = 20µs, Duty Cycle ≤ 1%	–	0.1	–	µs
NTE2567			–	0.2	–	µs
Storage Time NTE2566	t_{stg}		–	1.2	–	µs
NTE2567			–	0.4	–	µs
Collector Current Fall Time NTE2566	t_f		–	0.05	–	µs
NTE2567			–	0.1	–	µs



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