

NTE2536 (NPN) & NTE2537 (PNP) Silicon Complementary Transistors High Current Switch

Features:

- High Current Capacity
- Wide ASO Range
- Low Saturation Voltage

Applications:

- Motor Drivers
- Relay Drivers
- Converters

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Collector Base Voltage, V_{CBO}	110V
Collector Emitter Voltage, V_{CEO}	100V
Emitter Base Voltage, V_{EBO}	6V
Collector Current, I_C	
Continuous	40A
Peak	65A
Base Current, I_B	12A
Collector Power Dissipation ($T_C = +25^\circ\text{C}$), P_C	150W
Operating Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	-55° to +150°C

Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	$V_{CB} = 100V, I_E = 0$	–	–	0.1	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	–	–	0.1	mA
DC Current Gain	h_{FE}	$V_{CE} = 2V, I_C = 4A$	50	–	140	
		$V_{CE} = 2V, I_C = 16A$	20	–	–	
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 16A, I_B = 1.6A$	–	–	0.8	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 16A, I_B = 1.6A$	–	–	1.5	V
Collector Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 1mA, I_E = 0$	110	–	–	V
Collector Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 5mA, R_{BE} = \infty$	100	–	–	V
Emitter Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 1mA, I_C = 0$	6	–	–	V

