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NTE2652 (PNP) & NTE2653 (NPN) Silicon Complementary Transistors High Current Driver

Features:

- Low Saturation Voltage
- Large Current Capacity and Wide ASO

Applications:

- Power Supplies
- Relay Drivers
- Lamp Drivers
- Electrical Equipment

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ 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	3A
Pulsed	6A
Collector Dissipation, P_C	1W
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	V_{CBO}	$V_{CB} = 40V, I_E = 0$	-	-	1.0	μA
Emitter Cutoff Current	V_{EBO}	$V_{EB} = 4V, I_C = 0$	-	-	1.0	μA
DC Current Gain	h_{FE}	$V_{CE} = 2V, I_C = 100\text{mA}$	140	-	560	
		$V_{CE} = 2V, I_C = 3A$	-	40	-	
Gain-Bandwidth Product	f_T	$V_{CE} = 10V, I_C = 50\text{mA}$	-	150	-	MHz
Output Capacitance	C_{ob}	$V_{CB} = 10V, f = 1\text{MHz}$	-	25	-	pF
Collector to Emitter Saturation Voltage NTE2652	$V_{CE(sat)}$	$I_C = 2A, I_B = 100\text{mA}$	-	0.19	0.5	V
NTE2653			-	0.35	0.7	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 2A, I_B = 100\text{mA}$	-	0.94	1.2	V
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 10\mu\text{A}, I_E = 0$	60	-	-	V
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1\text{mA}, R_{BE} = \infty$	50	-	-	V
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 10\mu\text{A}, I_C = 0$	6	-	-	V

