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## NTE56 Silicon NPN Transistor High Gain Switch and Pass Regulator TO-220 Full Pack

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

Collector-Emitter Voltage, $V_{CEO}$ .....	80V
Collector-Base Voltage, $V_{CBO}$ .....	100V
Emitter-Base Voltage, $V_{EBO}$ .....	6V
Collector Current, $I_C$ .....	3A
Base Current, $I_B$ .....	1A
Collector Power Dissipation ( $T_C = +25^\circ\text{C}$ ), $P_D$ .....	25W
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	$I_{CBO}$	$V_{CB} = 100V$	-	-	10	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 6V$	-	-	100	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 25\text{mA}$	80	-	-	V
DC Current Gain	$h_{FE}$	$V_{CE} = 4V, I_C = 0.5A$	500	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 2A, I_B = 50\text{mA}$	-	-	0.5	V
Current Gain-Bandwidth Product	$f_T$	$V_{CE} = 12V, I_E = -0.2A$	-	15	-	MHz
Capacitance	$C_{OB}$	$V_{CB} = 10V, f = 1\text{MHz}$	-	50	-	pF

