

NTE22

Silicon NPN Transistor

AF PO, General Purpose Amp, Driver

Features:

- High Breakdown Voltage: $V_{CEO} = 80V$
- Large I_C Capacity: $I_C = 1A$ DC
- Good h_{FE} Linearity
- Low Collector Saturation Voltage

Applications:

- Medium Power Output Stages
- High-Voltage Drivers

Absolute Maximum Ratings:

Collector-Base Voltage, V_{CBO}	100V
Collector-Emitter Voltage, V_{CEO}	80V
Emitter-Base Voltage, V_{EBO}	5V
Collector Current, I_C	
Continuous	1A
Pulse (Note 1)	2A
Collector Dissipation, P_C	900mW
Junction Temperature, T_j	+135°C
Storage Temperature Range, T_{stg}	-55° to +125°C
Note 1. $P_W = 20ms$, Duty Cycle = 1/2	

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 1mA$	80	—	—	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 50\mu A$	100	—	—	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 50\mu A$	5	—	—	V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 80V$	—	—	1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V$	—	—	1	μA
DC Current Gain	h_{FE}	$V_{CE} = 3V, I_C = 50mA$	120	—	270	
Collector Saturation Voltage	$V_{CE(sat)}$	$I_C = 500A, I_B = 50mA$	—	0.15	0.4	V
Transition Frequency	f_T	$V_{CE} = 10V, I_C = 50mA$	—	100	—	MHz
Output Capacitance	C_{ob}	$V_{CB} = 10V, f = 1MHz$	—	20	—	pF

