

NTE18 (NPN) & NTE19 (PNP) Silicon Complementary Transistors High Voltage, High Current Capacity Driver

Applications:

- Drivers for Amplifiers of up to $P_O = 60W$

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

Collector–Base Voltage, V_{CBO}	80V
Collector–Emitter Voltage, V_{CEO}	80V
Emitter–Base Voltage, V_{EBO}	5V
Collector Current, I_C	
Continuous	700mA
Pulse (Note 1)	1A
Collector Dissipation, P_C	1W
Junction Temperature, T_J	+135°C
Storage Temperature Range, T_{stg}	–55° to +135°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	$V_{(BR)CEO}$	$I_C = 2mA$	80	–	–	V
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 50\mu A$	80	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 50\mu A$	5	–	–	V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 50V$	–	–	0.5	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 4V$	–	–	0.5	μA
DC Current Gain	h_{FE}	$V_{CE} = 3V, I_C = 100mA$	120	–	270	
Collector Saturation Voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 50mA$	–	200	400	mV
Transition Frequency	f_T	$V_{CE} = 10V, I_C = 50mA$	–	120	–	MHz
NTE18				100	–	MHz
Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	–	10	–	pF
NTE18				14	20	pF
NTE19						

