

NTE31 (NPN) & NTE32 (PNP) Silicon Complementary Transistors TV Sound Output, TV Vertical Output, AF Driver Output

Features:

- High Voltage: $V_{CEO} = 160V$
- High Continuous Collector Current Capability

Applications:

- Vertical Deflection Output & Sound Output Applications for Line Operated TV

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

Collector–Base Voltage, V_{CBO}	160V
Collector–Emitter Voltage, V_{CEO}	160V
Emitter–Base Voltage, V_{EBO}	6V
Collector Current, I_C	1A
Base Current, I_B	500mA
Collector Power Dissipation, P_C	900mW
Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	–55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	160	–	–	V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 150V, I_E = 0$	–	–	1.0	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 6V, I_C = 0$	–	–	1.0	μA
DC Current Gain	h_{FE}	$V_{CE} = 5V, I_C = 200mA$	100	–	200	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 50mA$	–	–	1.5	V
Base–Emitter Voltage	V_{BE}	$V_{CE} = 5V, I_C = 5mA$	0.45	–	0.75	V
Transition Frequency NTE31	f_T	$V_{CE} = 5V, I_C = 200mA$	20	100	–	MHz
NTE32			15	50	–	MHz
Collector Output Capacitance NTE31	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$	–	–	20	pF
NTE32			–	–	35	pF

