

NTE176 Germanium PNP Transistor Audio Power Amplifier

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

Collector–Base Voltage, V_{CBO}	20V
Emitter–Base Voltage, V_{EBO}	10V
Continuous Collector Current, I_C	2A
Total Power Dissipation ($T_C = +25^\circ\text{C}$), P_C	6W
Operating Junction Temperature, T_J	$+85^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+85^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CEO}	$V_{CE} = 10\text{V}, I_B = 0$	–	0.9	10	mA
	I_{CBO}	$V_{CB} = 20\text{V}, I_E = 0$	–	25	500	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 6\text{V}, I_C = 0$	–	10	500	μA
DC Current Gain	h_{FE}	$V_{CB} = 0, I_E = 2\text{A}$	40	75	–	–
Transition Frequency	f_T	$V_{CB} = 2\text{V}, I_E = 100\text{mA}$	0.3	1.2	–	MHz
Base–Emitter Voltage	V_{BE}	$V_{CB} = 0, I_E = 2\text{A}$	–	0.5	–	V
Collector–Emitter saturation Voltage	$V_{CE(sat)}$	$I_C = 2\text{A}, I_B = 200\text{mA}$	–	0.25	–	V

