

NTE376

Silicon NPN Transistor

TV Power Supply Driver/Audio Output

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

Collector–Base Voltage, V_{CBO}	300V
Collector–Emitter Voltage, V_{CEO}	300V
Emitter–Base Voltage, V_{EBO}	5V
Collector Current, I_C	200mA
Power Dissipation, P_C	15W
Operating Junction Temperature, T_j	$+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-45° to $+150^\circ\text{C}$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 100\mu\text{A}$, $I_E = 0$	300	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 5\text{mA}$, $R_{BE} = \infty$	300	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 100\mu\text{A}$, $I_C = 0$	5	–	–	V
Collector–Base Current	I_{CBO}	$V_{CB} = 250\text{V}$, $I_E = 0$	–	–	0.1	μA
Collector–Emitter Current	I_{CEO}	$V_{CE} = 250\text{V}$, $R_{BE} = \infty$	–	–	2	μA
DC Current Gain	h_{FE}	$V_{CE} = 10\text{V}$, $I_C = 50\text{mA}$	40	–	200	–
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 100\text{mA}$, $I_B = 10\text{mA}$	–	0.32	1.5	V
Base–Emitter Voltage	V_{BE}	$V_{CE} = 10\text{V}$, $I_C = 50\text{mA}$	–	0.66	0.9	V
Current Gain–Bandwidth Product	f_T	$V_{CE} = 20\text{V}$, $I_C = 30\text{mA}$	60	70	–	MHz
Collector–Base Capacitance	C_{ob}	$V_{CB} = 50\text{V}$, $I_E = 0$, $f = 1\text{MHz}$	–	6.2	8	pF

