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## NTE2307 Silicon NPN Transistor High Gain Power Amp

**Features:**

- High Voltage
- High DC Current Gain
- High Collector Power Dissipation Capability

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

Collector–Base Voltage, $V_{CBO}$ .....	200V
Collector–Emitter Voltage, $V_{CEO}$ .....	180V
Emitter–Base Voltage, $V_{EBO}$ .....	5V
Collector Current, $I_C$ .....	5A
Base Current, $I_B$ .....	2A
Collector Power Dissipation ( $T_C = +25^\circ\text{C}$ ), $P_C$ .....	80W
Operating Junction Temperature, $T_J$ .....	+150°C
Storage Temperature Range, $T_{stg}$ .....	–55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 200\text{V}, I_E = 0$	–	–	100	$\mu\text{A}$
	$I_{CEO}$	$V_{CE} = 180\text{V}, I_B = 0$	–	–	10	mA
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 5\text{V}, I_C = 0$	–	–	100	$\mu\text{A}$
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 50\text{mA}, I_B = 0$	180	–	–	V
DC Current Gain	$h_{FE}$	$V_{CB} = 5\text{V}, I_C = 1\text{A}$	500	–	2000	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 1\text{A}, I_B = 20\text{mA}$	–	–	1.0	V
Base–Emitter Voltage	$V_{BE}$	$V_{CE} = 5\text{V}, I_C = 1\text{A}$	0.6	0.7	0.8	V

