



ELECTRONICS, INC.
 44 FARRAND STREET
 BLOOMFIELD, NJ 07003
 (973) 748-5089
<http://www.nteinc.com>

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}	$V_{CB} = 200V, I_E = 0$	-	-	100	μA
	I_{CEO}	$V_{CE} = 180V, I_B = 0$	-	-	10	mA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	-	-	100	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 50mA, I_B = 0$	180	-	-	V
DC Current Gain	h_{FE}	$V_{CB} = 5V, I_C = 1A$	500	-	2000	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 1A, I_B = 20mA$	-	-	1.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 5V, I_C = 1A$	0.6	0.7	0.8	V

