



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

NTE2654 (NPN) & NTE2664 (PNP) Silicon Complementary Transistors Audio Power Amp Output

Features:

- High Collector Breakdown Voltage
- Suitable for use in 80W High Fidelity Audio Amplifier Output Stage

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

Collector-Base Voltage, V_{CBO}	230V
Collector-Emitter Voltage, V_{CEO}	230V
Emitter-Base Voltage, V_{EBO}	5V
Collector Current, I_C	15A
Base Current, I_B	1.5A
Collector Power Dissipation ($T_C = +25^\circ\text{C}$), P_C	130W
Operating Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	-55° to +150°C

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB} = 230V, I = 0$	-	-	5.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$	-	-	5.0	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 50\text{mA}, I_B = 0$	230	-	-	V
DC Current Gain NTE2654	h_{FE}	$V_{CE} = 5V, I_C = 1A$	80	-	160	
NTE2664			55	-	160	
Both Devices		$V_{CE} = 5V, I_C = 7A$	35	60	-	
Collector-Emitter Saturation Voltage NTE2654	$V_{CE(sat)}$	$I_C = 8A, I_B = 0.8A$	-	0.4	3.0	V
NTE2664			-	1.5	3.0	V
Base-Emitter Voltage	V_{BE}	$V_{CE} = 5V, I_C = 7A$	-	1.0	1.5	V
Transition Frequency	f_T	$V_{CE} = 5V, I_C = 1A$	-	30	-	MHz
Collector Output Capacitance NTE2654	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1\text{MHz}$	-	200	-	pF
NTE2664			-	360	-	pF

