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## NTE297 (NPN) & NTE298 (PNP) Silicon Complementary Transistors Audio Amplifier, Driver Giant TO92 Type Package

### Features:

- High Collector-Emitter Voltage
- Ideal for 25 – 30W Low-Frequency Output Drive

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

Collector-Base Voltage, $V_{CBO}$ .....	80V
Collector-Emitter Voltage, $V_{CEO}$ .....	80V
Emitter-Base Voltage, $V_{EBO}$ .....	5V
Collector Current, $I_C$	
Continuous .....	0.5A
Peak .....	1A
Collector Power Dissipation, $P_C$ .....	1W
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	$I_{CBO}$	$V_{CB} = 20\text{V}$ , $I_E = 0$	–	–	0.1	°A
Collector-Base Voltage	$V_{CBO}$	$I_C = 10^\circ\text{A}$ , $I_E = 0$	80	–	–	V
Collector-Emitter Voltage	$V_{CEO}$	$I_C = 100^\circ\text{A}$ , $I_B = 0$	80	–	–	V
Emitter-Base Voltage	$V_{EBO}$	$I_E = 10^\circ\text{A}$ , $I_C = 0$	5	–	–	V
DC Current Gain	$h_{FE}$	$V_{CE} = 10\text{V}$ , $I_C = 150\text{mA}$ , Note 2	130	–	330	
		$V_{CE} = 5\text{V}$ , $I_C = 500\text{mA}$ , Note 2	50	100	–	
Collector-Emitter Saturation Voltage	$V_{CE(\text{sat})}$	$I_C = 300\text{mA}$ , $I_B = 30\text{mA}$ , Note 2	–	0.2	0.4	V
Base-Emitter Saturation Voltage	$V_{BE(\text{sat})}$	$I_C = 300\text{mA}$ , $I_B = 30\text{mA}$ , Note 2	–	0.85	1.2	V
Transition Frequency	$f_T$	$V_{CB} = 10\text{V}$ , $I_E = 50\text{mA}$ , $f = 100\text{MHz}$	–	120	–	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = 10\text{V}$ , $I_E = 0$ , $f = 1\text{MHz}$	–	11	20	pF

Note 1. NTE297MP is a matched pair of NTE297 with their DC Current Gain ( $h_{FE}$ ) matched to within 10% of each other.

Note 2. Pulse Measurement

