ELECTRONICS, INC.
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NTE297 (NPN) & NTE298 (PNP)
Silicon Complementary Transistors
Audio Amplifier, Driver

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

Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

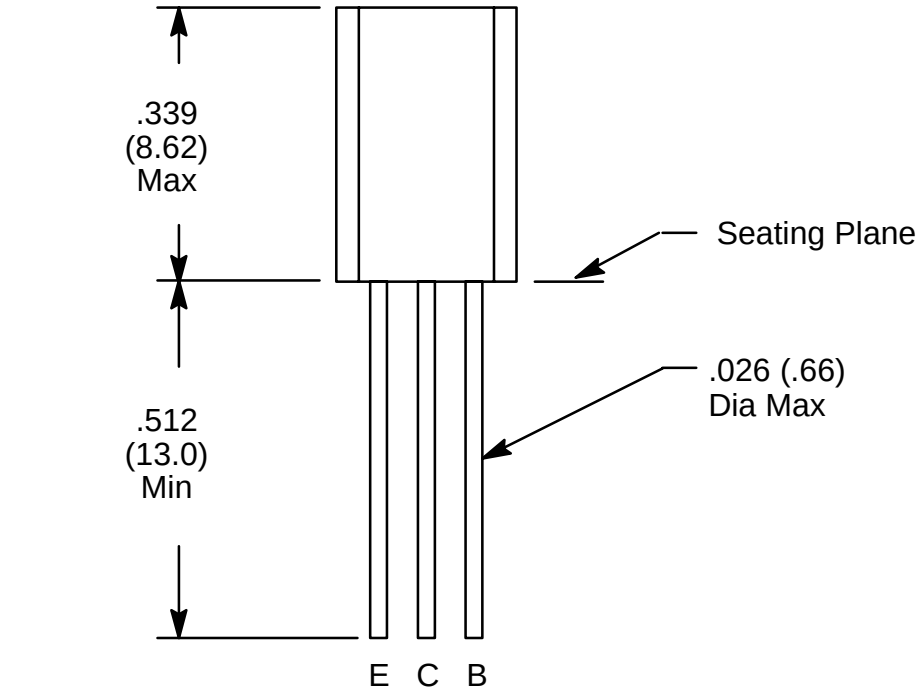
Collector–Base Voltage, V_{CBO} 80V
Collector–Emitter Voltage, V_{CEO} 80V
Emitter–Base Voltage, V_{EBO} 5V
Collector Current, I_C
  Continuous 0.5A
  Peak 1A
Collector Power Dissipation, P_C 1W
Operating Junction Temperature, T_J . . . . . +150°C
Storage Temperature Range, T_{stg} . . . . . –55° to +150°C

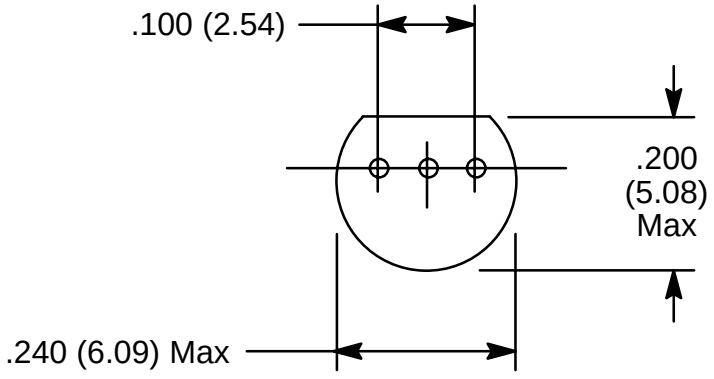
Electrical Characteristics: (T_A = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 20V, I_E = 0	–	–	0.1	μA
Collector–Base Voltage	V_{CBO}	I_C = 10μA, I_E = 0	80	–	–	V
Collector–Emitter Voltage	V_{CEO}	I_C = 100μA, I_B = 0	80	–	–	V
Emitter–Base Voltage	V_{EBO}	I_E = 10μA, I_C = 0	5	–	–	V
DC Current Gain	h_{FE}	V_{CE} = 10V, I_C = 150mA, Note 2	130	–	220	
		V_{CE} = 5V, I_C = 500mA, Note 2	50	100	–	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 300mA, I_B = 30mA, Note 2	–	0.2	0.4	V
Base–Emitter Saturation Voltage	$V_{BE(sat)}$	I_C = 300mA, I_B = 30mA, Note 2	–	0.85	1.2	V
Transition Frequency	f_T	V_{CB} = 10V, I_E = 50mA, f = 100MHz	–	120	–	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = 10V, I_E = 0, f = 1MHz	–	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


.339
(8.62)
Max
Seating Plane
.026 (.66)
Dia Max
.512
(13.0)
Min
E C B


.100 (2.54)
.200
(5.08)
Max
.240 (6.09) Max