ELECTRONICS, INC.
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NTE16006
Silicon NPN Transistor
Low Frequency Output Amp
w/High Current Gain

Features:

- High DC Current Gain
- Low Collector–Emitter Saturation Voltage
- An M type mold package that allows easy manual and automatic insertion. Can be firmly mounted flush to PCB surface

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

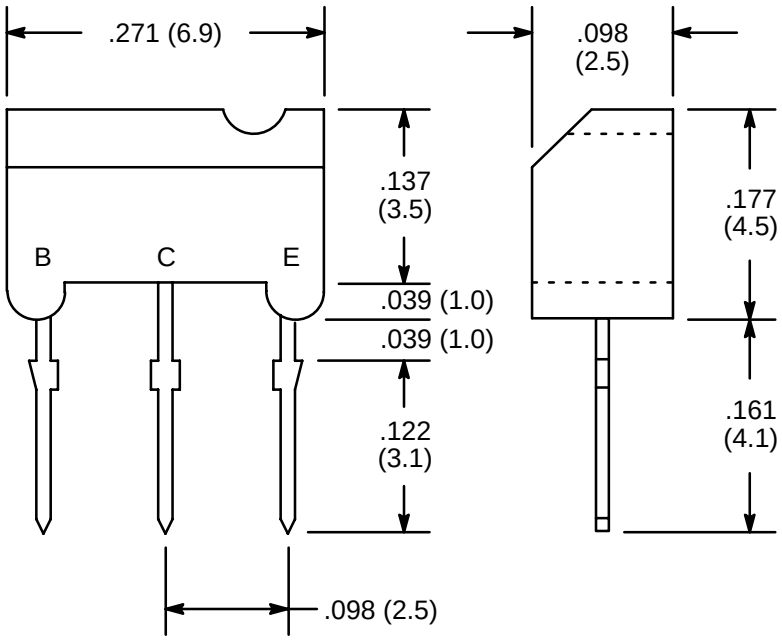
Collector–Base Voltage, V_{CBO} 20V
Collector–Emitter Voltage, V_{CEO} 20V
Emitter–Base Voltage, V_{EBO} 15V
Collector Current, I_C
Continuous 700mA
Peak 1.5A
Collector Power Dissipation (Note 1), P_C 1W
Operating Junction Temperature, T_J . . . . . +150°C
Storage Temperature Range, T_{stg} . . . . . –55 ° to +150°C

Note 1. Copper foil on PCB against Collector: 1.7mm thick, 1cm^2 in area.

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cutoff Current	I_{CBO}	V_{CB} = 15V, I_E = 0	–	–	1	µA
Emitter Cut–Off Current	I_{CEO}	V_{CE} = 15V, I_B = 0	–	–	10	µA
Collector–Base Voltage	V_{CBO}	I_C = 10µA, I_E = 0	20	–	–	V
Collector–Emitter Voltage	V_{CEO}	I_C = 1mA, I_B = 0	20	–	–	V
Emitter–Base Voltage	V_{EBO}	I_E = 10µA, I_C = 0	15	–	–	V
DC Current Gain	h_{FE}	V_{CE} = 10V, I_C = 150mA, Note 2	1000	–	2500	–
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 500mA, I_B = 50mA, Note 2	–	–	0.4	V
Transition Frequency	f_T	V_{CB} = 20V, I_E = –20mA, f = 200MHz	–	55	–	MHz
Collector Output Capacitance	C_{ob}	V_{CB} = 10 V, I_E = 0, f = 1MHz	–	11	15	pF

Note 2. Pulse Measurement


.271 (6.9)
.098
(2.5)
.137
(3.5)
.177
(4.5)
B
C
E
.039 (1.0)
.039 (1.0)
.122
(3.1)
.161
(4.1)
.098 (2.5)