ELECTRONICS, INC.
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NTE31 (NPN) & NTE32 (PNP)
Silicon Complementary Transistors
TV Sound Output, TV Vertical Output, AF Driver Output

Features:
- High Voltage: V_{CEO} = 160V
- High Continuous Collector Current Capability

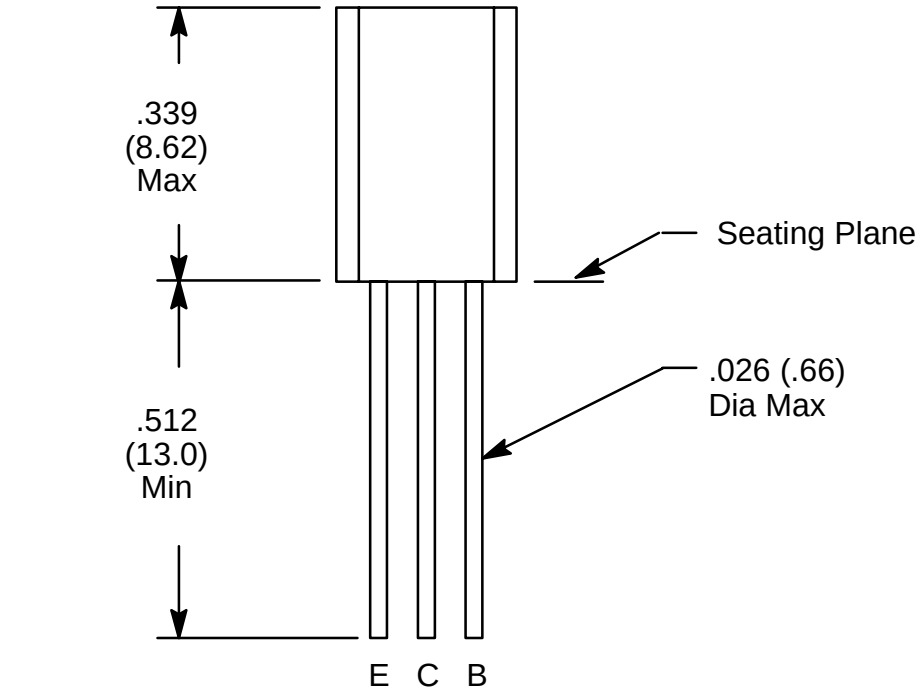
Applications:
- Vertical Deflection Output & Sound Output Applications for Line Operated TV

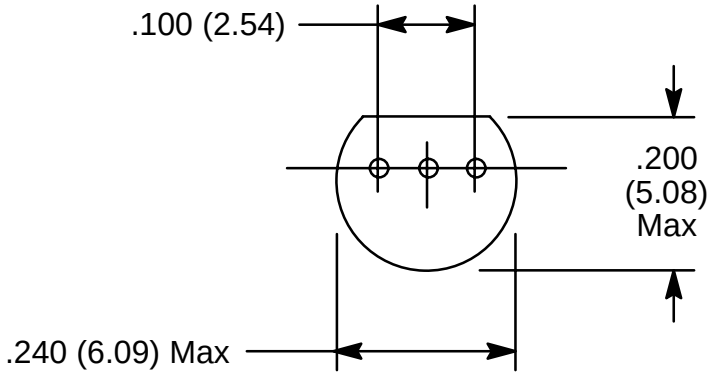
Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Collector–Base Voltage, V_{CBO} 160V
Collector–Emitter Voltage, V_{CEO} 160V
Emitter–Base Voltage, V_{EBO} 6V
Collector Current, I_C 1A
Base Current, I_B 500mA
Collector Power Dissipation, P_C 900mW
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–Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 10mA, I_B = 0	160	–	–	V
Collector Cutoff Current	I_{CBO}	V_{CB} = 150V, I_E = 0	–	–	1.0	µA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 6V, I_C = 0	–	–	1.0	µA
DC Current Gain	h_{FE}	V_{CE} = 5V, I_C = 200mA	100	–	200	
Collector–Emitter Saturation Voltage	$V_{CE(sat)}$	I_C = 500mA, I_B = 50mA	–	–	1.5	V
Base–Emitter Voltage	V_{BE}	V_{CE} = 5V, I_C = 5mA	0.45	–	0.75	V
Transition Frequency NTE31	f_T	V_{CE} = 5V, I_C = 200mA	20	100	–	MHz
NTE32			15	50	–	MHz
Collector Output Capacitance NTE31	C_{ob}	V_{CB} = 10V, I_E = 0, f = 1MHz	–	–	20	pF
NTE32			–	–	35	pF


.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