ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089

NTE340
Silicon NPN Transistor
RF Power Output, High Frequency

Features:

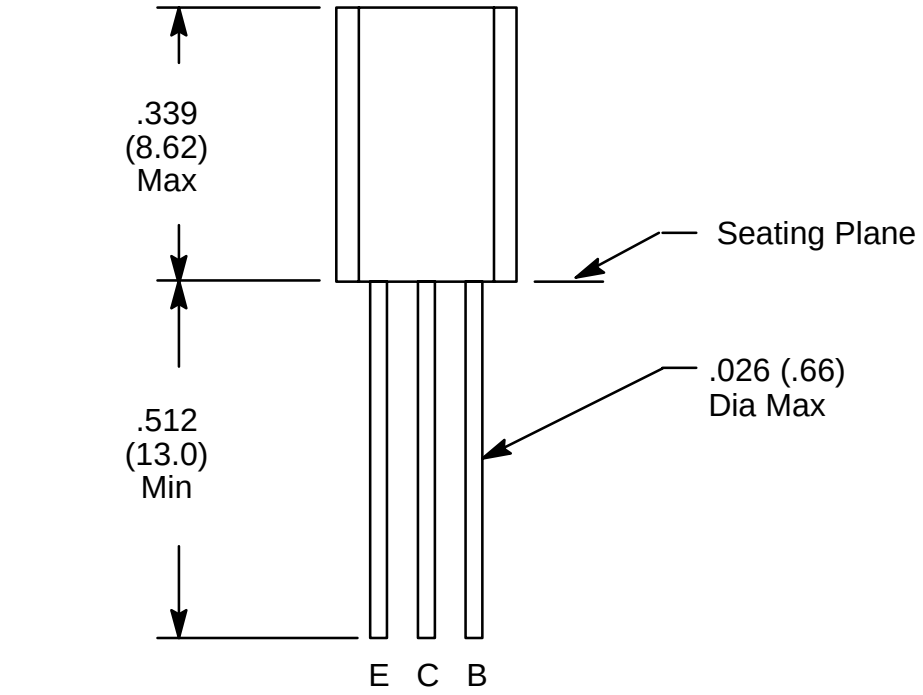
- High Transition Frequency
- Output of 0.6W can be obtained in the VHF Band (f = 175MHz).

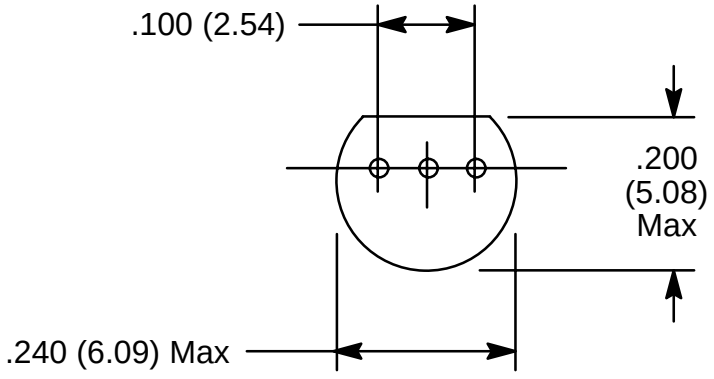
Absolute Maximum Ratings: (T_A = +25°C unless otherwise specified)

Collector–Base Voltage, V_{CBO} 36V
Collector–Emitter Voltage, V_{CEO} 16V
Emitter–Base Voltage, V_{EBO} 3V
Peak Collector Voltage, I_{CP} 0.5A
Collector Current, I_C 0.3A
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	–	–	10	μA
DC Current Gain	h_{FE}	V_{CE} = 13.5V, I_C = 100mA	20	50	–	–
Transition Frequency	f_T	V_{CB} = 10V, I_E = –100mA, f = 200MHz	1.5	2	–	GHz
Collector Output Capacitance	C_{ob}	V_{CB} = 10V, I_E = 0, f = 1MHz	–	4	8	pF
High–Frequency Output	P_O	V_{CC} = 13.5V, P_I = 0.03W, f = 175MHz	0.6	0.9	–	W
Overall Efficiency	η	V_{CC} = 13.5V, P_I = 0.03W, f = 175MHz	–	60	–	%


.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