ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089
http://www.nteinc.com

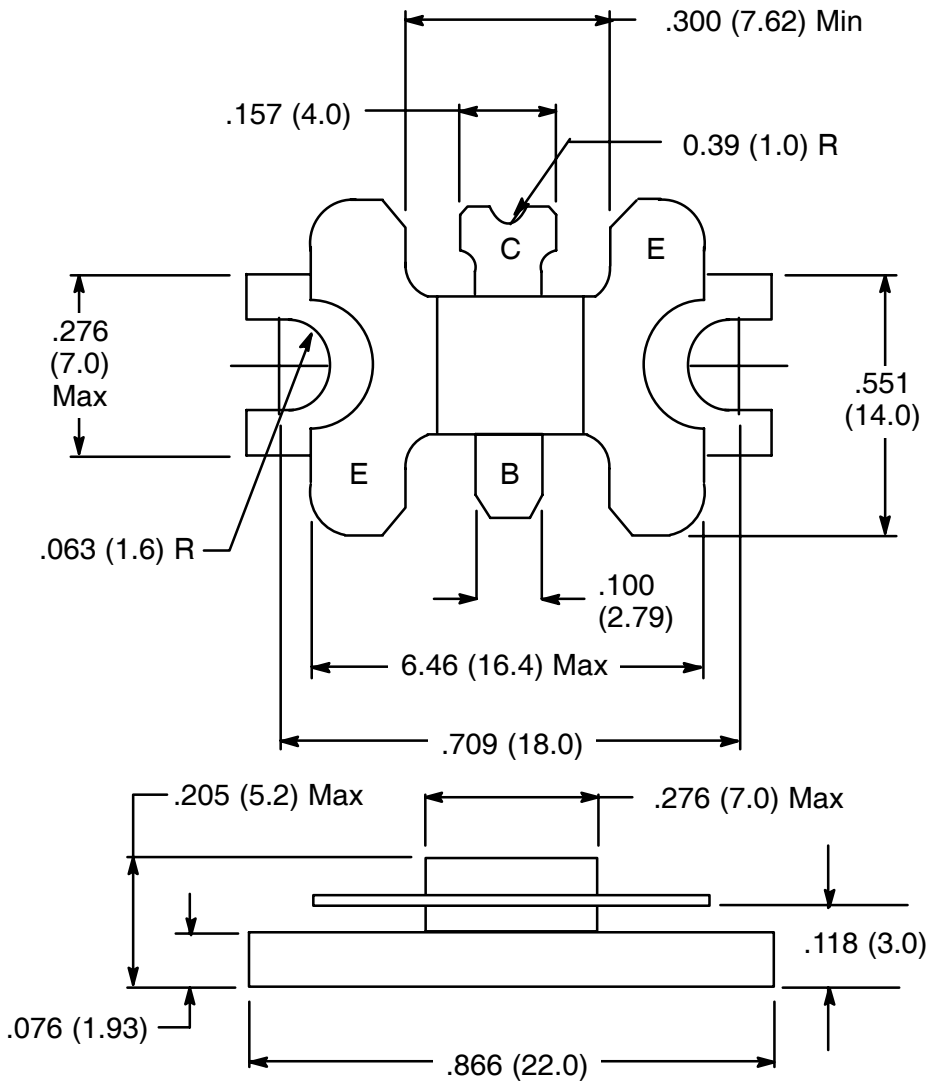
NTE344
Silicon NPN Transistor
RF Power Output
P_O = 30W @ 175MHz

Absolute Maximum Ratings:

Collector–Emitter Voltage, V_{CEO} 17V
Collector–Base Voltage, V_{CBO} 35V
Emitter–Base Voltage, V_{EBO} 4V
Continuous Collector Current, I_C 7A
Collector Power Dissipation, P_C 50W
Operating Junction Temperature, T_j . . . . . +175°C
Storage Temperature Range, T_{stg} . . . . . –65° to +175°C
Thermal Resistance, Junction–to–Case, R_{thJC} . . . . . 3°C/W

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Collector–Base Breakdown Voltage	$V_{(BR)CBO}$	I_C = 10mA, I_E = 0	35	–	–	V
Emitter–Base Breakdown Voltage	$V_{(BR)EBO}$	I_E = 10mA, I_C = 0	4	–	–	V
Collector–Emitter Breakdown Voltage	$V_{(BR)CEO}$	I_C = 100mA, R_{BE} = ∞	17	–	–	V
Collector Cut–Off Current	I_{CBO}	V_{CB} = 25V, I_E = 0	–	–	2	mA
Emitter Cutoff Current	I_{EBO}	V_{EB} = 3V, I_C = 0	–	–	1	mA
DC Current Gain	h_{FE}	V_{CE} = 10V, I_C = 0.2A	10	50	180	–
Amplifier Power Out	P_O	V_{CC} 13.5V, f = 175MHz, P_{in} = 6W	28	32	–	W
Collector Efficiency	η_C	V_{CC} = 13.5V, f = 175MHz, P_{in} = 6W	60	70	–	%


.300 (7.62) Min
.157 (4.0)
0.39 (1.0) R
C
E
.276
(7.0)
Max
.551
(14.0)
E
B
.063 (1.6) R
.100
(2.79)
6.46 (16.4) Max
.709 (18.0)
.205 (5.2) Max
.276 (7.0) Max
.118 (3.0)
.076 (1.93)
.866 (22.0)