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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: ($T_A = +25^\circ C$ 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	$V_{(BR)CEO}$	$I_C = 100mA, R_{BE} = \infty$	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	–	%

