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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°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	–	%

