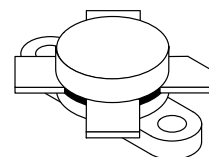


Designed primarily for high-voltage applications as a high-power linear amplifier from 2.0 to 30 MHz. Ideal for marine and base station equipment.

- ⊗ Specified 50 Volt, 30 MHz Characteristics
 - Output Power = 250 W
 - Minimum Gain = 12 dB
 - Efficiency = 45%
- ⊗ Intermodulation Distortion @ 250 W (PEP) —
 - IMD = -30 dB (Max)
- ⊗ 100% Tested for Load Mismatch at all Phase Angles with 3:1 VSWR



CASE 211-11, STYLE 1

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	50	Vdc
Collector-Base Voltage	V_{CBO}	100	Vdc
Emitter-Base Voltage	V_{EBO}	4.0	Vdc
Collector Current — Continuous	I_C	16	Adc
Withstand Current — 10 s	—	20	Adc
Total Device Dissipation @ $T_C = 25^\circ\text{C}$ (1) Derate above 25°C	P_D	290 1.67	Watts W/°C
Storage Temperature Range	T_{stg}	-65 to +150	°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case	$R_{\theta JC}$	0.6	°C/W

ELECTRICAL CHARACTERISTICS ($T_C = 25^\circ\text{C}$ unless otherwise noted.)

Characteristic	Symbol	Min	Typ	Max	Unit
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OFF CHARACTERISTICS

Collector-Emitter Breakdown Voltage ($I_C = 200\text{ mAdc}$, $I_B = 0$)	$V_{(BR)CEO}$	50	—	—	Vdc
Collector-Emitter Breakdown Voltage ($I_C = 100\text{ mAdc}$, $V_{BE} = 0$)	$V_{(BR)CES}$	100	—	—	Vdc
Collector-Base Breakdown Voltage ($I_C = 100\text{ mAdc}$, $I_E = 0$)	$V_{(BR)CBO}$	100	—	—	Vdc
Emitter-Base Breakdown Voltage ($I_E = 10\text{ mAdc}$, $I_C = 0$)	$V_{(BR)EBO}$	4.0	—	—	Vdc

ON CHARACTERISTICS

DC Current Gain ($I_C = 5.0\text{ Adc}$, $V_{CE} = 10\text{ Vdc}$)	h_{FE}	10	30	—	—
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DYNAMIC CHARACTERISTICS

Output Capacitance ($V_{CB} = 50\text{ Vdc}$, $I_E = 0$, $f = 1.0\text{ MHz}$)	C_{ob}	—	350	450	pF
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FUNCTIONAL TESTS

Common-Emitter Amplifier Power Gain ($V_{CC} = 50\text{ Vdc}$, $P_{out} = 250\text{ W CW}$, $f = 30\text{ MHz}$, $I_{CQ} = 250\text{ mA}$)	G_{PE}	12	14	—	dB
Collector Efficiency ($V_{CC} = 50\text{ Vdc}$, $P_{out} = 250\text{ W}$, $f = 30\text{ MHz}$, $I_{CQ} = 250\text{ mA}$)	η	—	45 65	—	% (PEP) % (CW)
Intermodulation Distortion (2) ($V_{CE} = 50\text{ Vdc}$, $P_{out} = 250\text{ W (PEP)}$, $I_{CQ} = 250\text{ mA}$, $f = 30\text{ MHz}$)	IMD	—	-33	-30	dB
Electrical Ruggedness ($V_{CC} = 50\text{ Vdc}$, $P_{out} = 250\text{ W CW}$, $f = 30\text{ MHz}$, VSWR 3:1 at all Phase Angles)	ψ	No Degradation in Output Power			

Note : Above parameters , ratings , limits and conditions are subject to change .