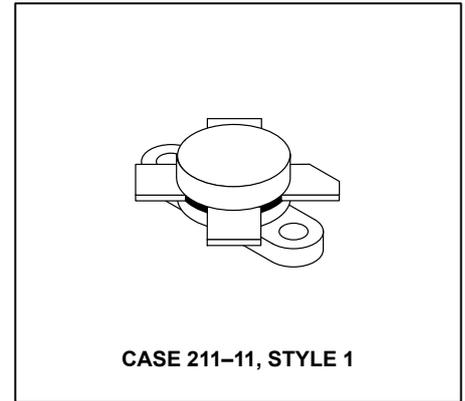


Designed primarily for high-voltage applications as a high-power linear amplifier from 2.0 to 30 MHz. Ideal for marine and base station equipment.

- ⊗ 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



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 @ $T_C = 25^{\circ}C$ (1) Derate above 25 $^{\circ}C$	P_D	290 1.67	Watts W/5C
Storage Temperature Range	T_{stg}	-65 to +150	5C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case	$R_{\theta JC}$	0.6	5C/W

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

Characteristic	Symbol	Min	Typ	Max	Unit
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OFF CHARACTERISTICS

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

ON CHARACTERISTICS

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

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

Common-Emitter Amplifier Power Gain ($V_{CC} = 50$ Vdc, $P_{out} = 250$ W CW, $f = 30$ MHz, $I_{CQ} = 250$ mA)	G_{PE}	12	14	—	dB
Collector Efficiency ($V_{CC} = 50$ Vdc, $P_{out} = 250$ W, $f = 30$ MHz, $I_{CQ} = 250$ mA)	η	—	45 65	—	% (PEP) % (CW)
Intermodulation Distortion (2) ($V_{CE} = 50$ Vdc, $P_{out} = 250$ W (PEP), $I_{CQ} = 250$ mA, $f = 30$ MHz)	IMD	—	-33	-30	dB
Electrical Ruggedness ($V_{CC} = 50$ Vdc, $P_{out} = 250$ W CW, $f = 30$ 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 .