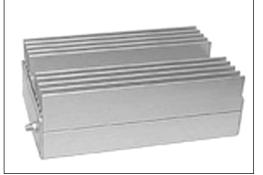


## **AMP-900/20B** HIGH POWER AMPLIFIER FOR 902-928MHz



**Model:** AMP-900/20 is a 20-watt RF MOSFET Amplifier Module for 12.5-volt mobile radios that operate in the 896- to 941-MHz range. A special band pass filter for 902-928 MHz has been used with a great rejection of unwanted frequencies out of the band. The battery can be connected directly to the drain of the enhancement-mode MOSFET transistors. This module is designed for non-linear FM modulation, but may also be used for linear modulation by setting the drain quiescent current with the gate voltage and controlling the output power with the input power.

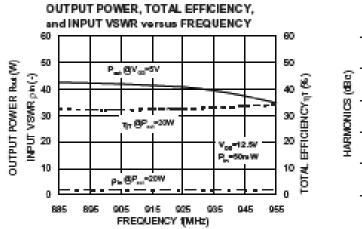
## FEATURES

- Enhancement-Mode MOSFET Transistors (IDD0 @ VDD=12.5V, VGG=0V)
- Pout>20W, T>25% @ VDD=12.5V, VGG=5V, Pin=50mW
- Broadband Frequency Range: 896-941MHz
- Low-Power Control Current Igg=1mA (typ) at Vgg=5V
- · Linear operation is possible by setting the quiescent drain current

Symbol	Parameter	Value	Unit
Vs	Voltage Supply	12.6	V dc
Is	Current Supply	4.5	A dc
Tstg	Storage Temperature Range	-20 + 80	°C
Tc	<b>Operating Base Plate Temperature</b> <sup>1</sup>	$0+75^{-2}$	°C
ψ	VSWR max	3:1 all phase angle	-
	Input power	20-50 mW	-
	Max cw output power	25	Watt MAX

Amplifier has built-in a filter cutting frequencies bellow 902 and above 928 MHz, the loss over the band is over 30-50 dB. If you need a full band from 896-941 remove the filter located at the input.

## TYPICAL PERFORMANCE (Tesse=+25°C, Zg=ZL=50Ω, unless otherwise specified)



## 2<sup>-4</sup>, 3<sup>rd</sup> HARMONICS versus FREQUENCY

