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# ZH-8850

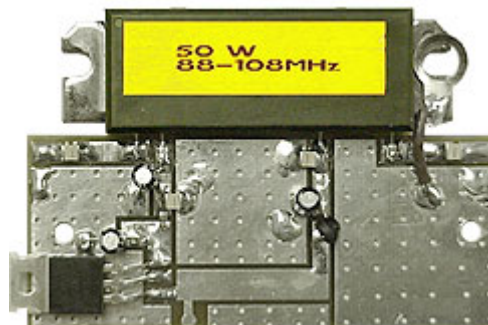
## HIGH POWER AMPLIFIER

### 55 W from 88 MHz-108 MHz

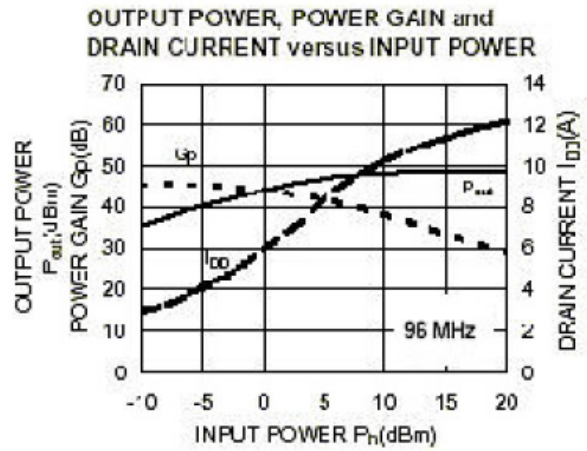
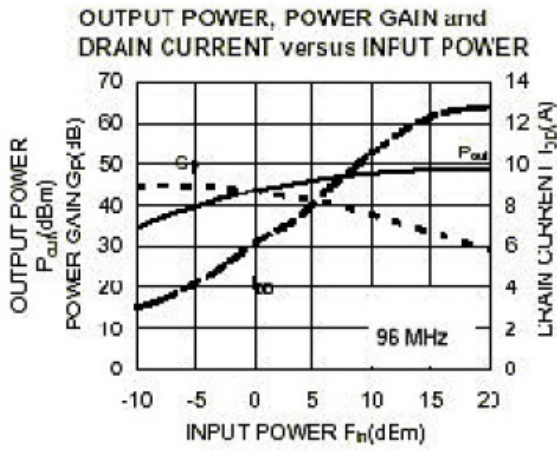
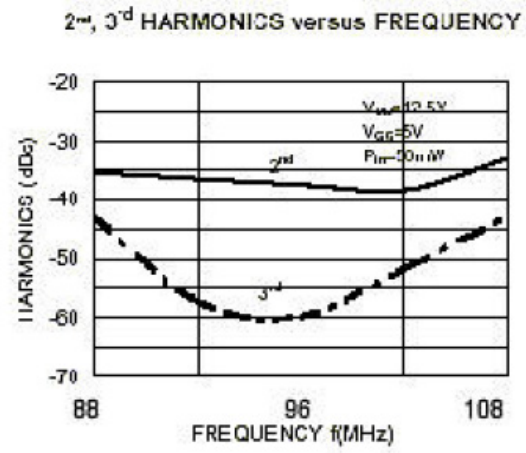
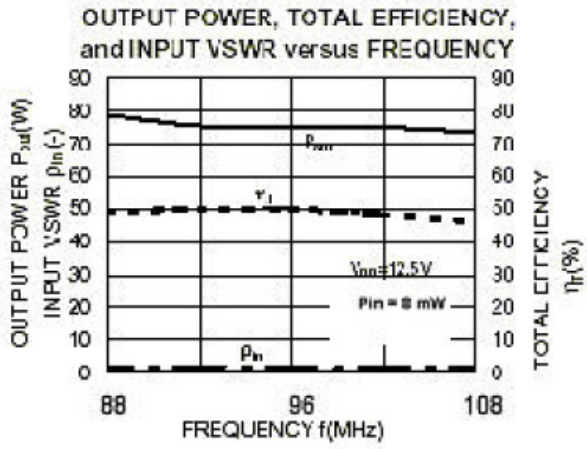
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This is a tested high quality professional FM amplifier for 88-108 MHz. This amplifier requires a minimum driving input of 8 mW for the maximum of 50 W RF power output. It is broadband in 88 MHz- 108 MHz and doesn't require any tuning or adjusting. Power supply is 12.6 V - 17 V / 10 A. Gain 29 dB. Input / Output 50 ohms impedance. Class of operation AB.

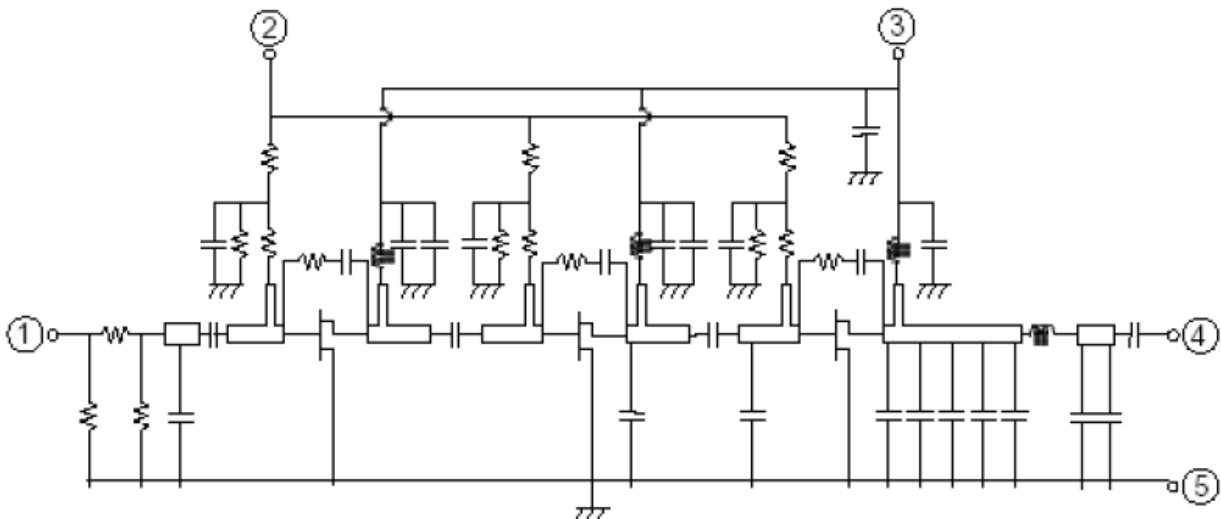
Dimensions: 2.5" X 3"



Technical Specifications	
Operating Frequency:	88 MHz-108 MHz
Operating class:	Linear
DC Voltage:	12 V
RF power:	50 W / 100 MHz
Input power:	10 mW
Minimum required voltage:	10 V
Battery power:	12.6 V - 17 V
Current Consumption:	10 A / 12 V
Antenna:	N/A
Antenna Connector:	N/A
Impedance:	50 ohms
Gain:	29 dB / 100 MHz
Temperature Range:	-40 +75* C
Dimensions:	2.5" x 3.0"
Weight:	55 grams



**OUTPUT POWER, POWER GAIN and DRAIN CURRENT versus INPUT POWER**



**SCHEMATIC DIAGRAM**

**ELECTRICAL CHARACTERISTICS** ( $T_{case}=+25^{\circ}C$ ,  $Z_G=Z_L=50\Omega$ , unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
f	Frequency Range		88		108	MHz
$P_{out}$	Output Power				50	W
$\eta_T$	Total Efficiency	$V_{DD}=12.5V$	40			%
$2f_o$	2 <sup>nd</sup> Harmonic	$V_{GG}=5V$			-25	dBc
$\rho_{in}$	Input VSWR	$P_{in}= 8 \text{ mW}$			3:1	—
$I_{GG}$	Gate Current				2	mA
—	Stability	$V_{DD}=10.0-15.2V$ , $P_{in}= \text{ mW}$ , $P_{out} < \text{ W}$ ( $V_{GG}$ control), Load VSWR=3:1	No parasitic oscillation			—
—	Load VSWR Tolerance	$V_{DD}=15.2V$ , $P_{in}= 8 \text{ mW}$ , $P_{out}: 50 \text{ W}$ Load VSWR=8:1	No degradation or destroy			—