

Model SM1923-44

1900-2300 MHz 25 Watt Linear Power Amplifier PCS APPLICATIONS

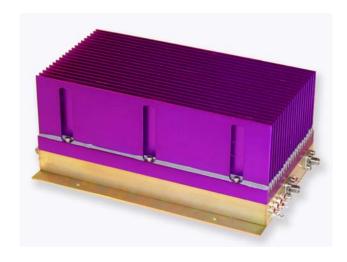
The **SM1923-44** is a solid state GaAs amplifier designed primarily for the Personal Communication Systems (PCS) market. This amplifier operates from 1.9-2.3 GHz, provides 55 dB of gain, ± 0.5 dB gain flatness over the full band, and +44 dBm of output power at its 1 dB compression point. The output third order intercept point is +55 dBm. Its compact size and high linearity make it ideally suited for systems using CDMA or TDMA standards. The unit is available standard as a module with six (6) thru-holes. Modular heatsink or 19" rack versions are available.

Features

- Single Power Supply
- Over Voltage Protection
- Thermal Protection with Auto Reset
- Temperature Compensation

Options

- Forward/Reverse Power Detection
- RF Sampling
- Pulse Control with switching speeds up to 100 kHz
- Logic On/Off Control
- Integral Heatsink



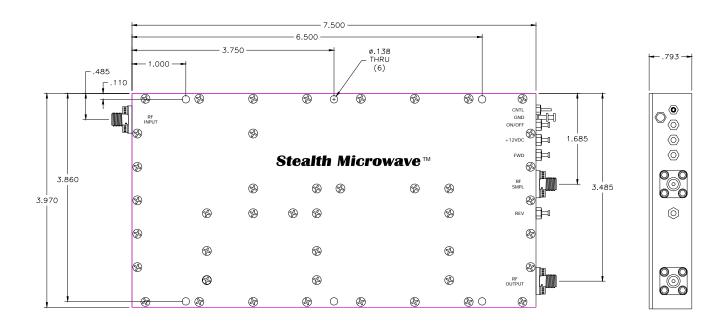
Parameter	Specification	
Frequency Range	1.9 - 2.3 GHz (in 100 MHz Bands)	
	,	
Pout (P1dB)	+ 44 dBm	
Third Order Intercept	+ 55 dBm	
Point		
Linear Gain	55 dB ± 1 dB	
Gain Flatness over Full	± .5 dB	
Band		
Gain Change over	± .5 dB	
Temperature		
Input/Output Return	-16 dB / -16 dB	
Loss		
DC Input Voltage	+ 12 Volts	
DC Input Current	7.5 Amps. (operational)	
Mechanical Dimensions	7.5 x 4.0 x 0.8 Inches	
Without Heatsink		
RF Connectors	SMA Female	
Operating Temperature	0°C to +55°C	
Operating Humidity	95% Non-condensing	
Operating Altitude	Up to 10,000 feet above	
	Sea Level	

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DIMENSIONS IN INCHES



Pin	Description	Values
RF INPUT	Input Connector (SMA Female)	-9 dBm typical
RF OUTPUT	Output Connector (SMA Female)	+44dBm @P1dB
RF SAMPLE	Sample RF Port (SMA Female)	30 dBr
GND	Ground Turret	
FWD	Forward Power Detector	+ 36 dBm Output Power ≈ + 1.2 Volts
REV	Reverse Power Detector	∞ VSWR @ + 36 dBm \approx + 3.0 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 8.2 Amps (operational)
ON/OFF	TTL Logic On/Off	0 Volts = Off, +5 Volts = On
CNTL	TTL Pulse Control	Rates up to 100 kHz

Specifications subject to change without notice.

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