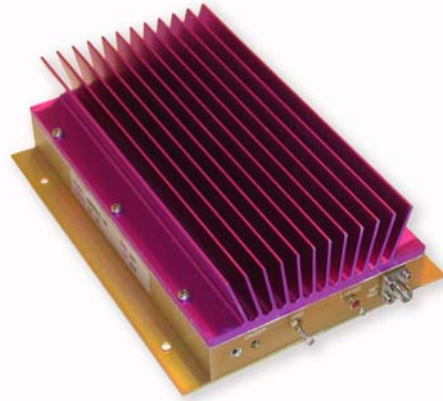


The **SM09296-43** is a 925-960 MHz solid state GaAs FET amplifier designed for the Cellular/GSM telephony market. It is one of the smallest amplifiers in the industry to deliver 20 watts. The output IP3 is +58 dBm, and the linear gain is 41 dB with only  $\pm 0.5$  dB gain change over the full temperature range of 0 to +55 °C. The unit is available standard in modular form or as a rack mountable amplifier.



**Features**

- Mis-Match Protected
- Single Power Supply
- Over/Reverse Voltage Protection
- Thermal Protection with Auto Reset

**Options**

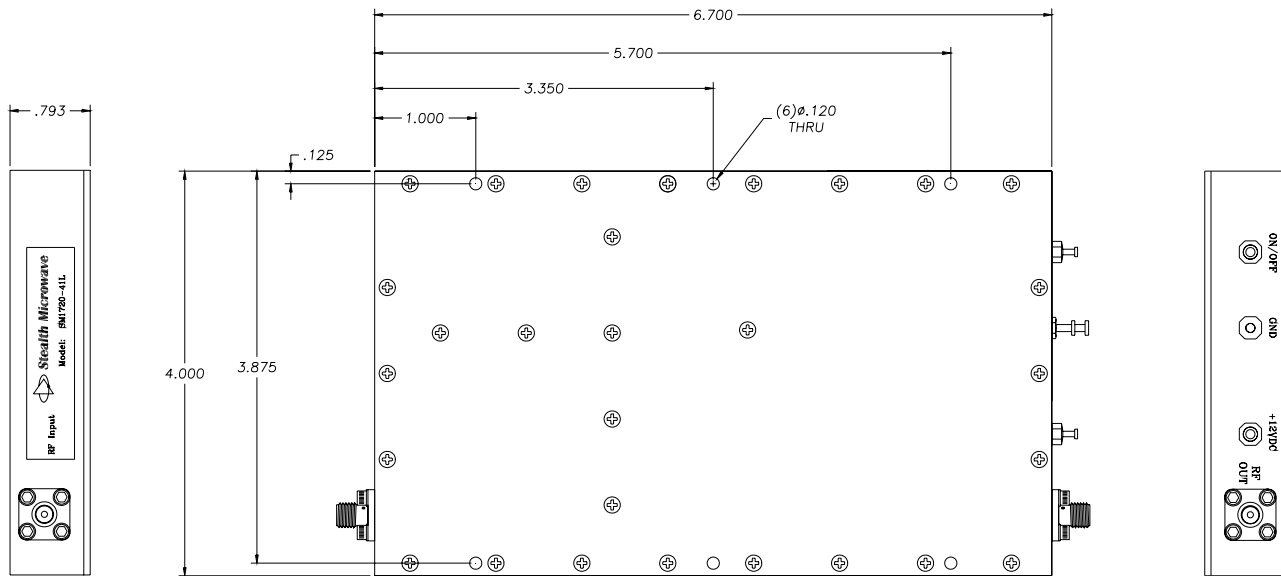
- Forward Power Detection
- Logic On/Off Control
- Heatsink

**Configurations**

- Module
- 19" Rack

Parameter	Specification
Frequency Range	925 – 960 MHz
Pout (P1dB)	+ 43 dBm (min.)
Third Order Intercept Point	+ 53 dBm
Linear Gain	41 dB $\pm$ 1 dB
Gain Flatness over Full Band	$\pm .5$ dB
Gain Change over Temperature	$\pm .5$ dB
Input/Output Return Loss	-16 dB / -16dB
DC Supply	+ 12 Volts @ 6.0 Amperes
Mechanical Dimensions Without Heatsink	7.5 x 4.0 x 0.8 inches
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

## DIMENSIONS IN INCHES



Pin	Description	Values
RF Input	Input Connector (SMA Female)	+2 dBm, typical
RF Output	Output Connector (SMA Female)	+ 43 dBm (P1 dB)
GND	Ground Turret	---
FWD	Forward Power Detector	+ 40 dBm Output Power $\approx$ + 5 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 6.0 Amperes
I/O	TTL Logic On/Off	0 Volts = Off, + 5 Volts = On

*Specifications subject to change without notice.*