

The **SM2022-50L** is a solid state GaAs FET amplifier designed for various high power or multi-carrier applications. The amplifier operates over a frequency band of 2000 to 2200 MHz and has a P1dB of +50 dBm. Linear gain is +59 dB, gain flatness is  $\pm 0.5$  dB over the full band, and has an OIP3 of +68 dBm.

### Features

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

### Options

- Forward/Reverse Power Detection
- RF Sampling
- TTL On/Off Control
- Integral Heatsink with two cooling fans

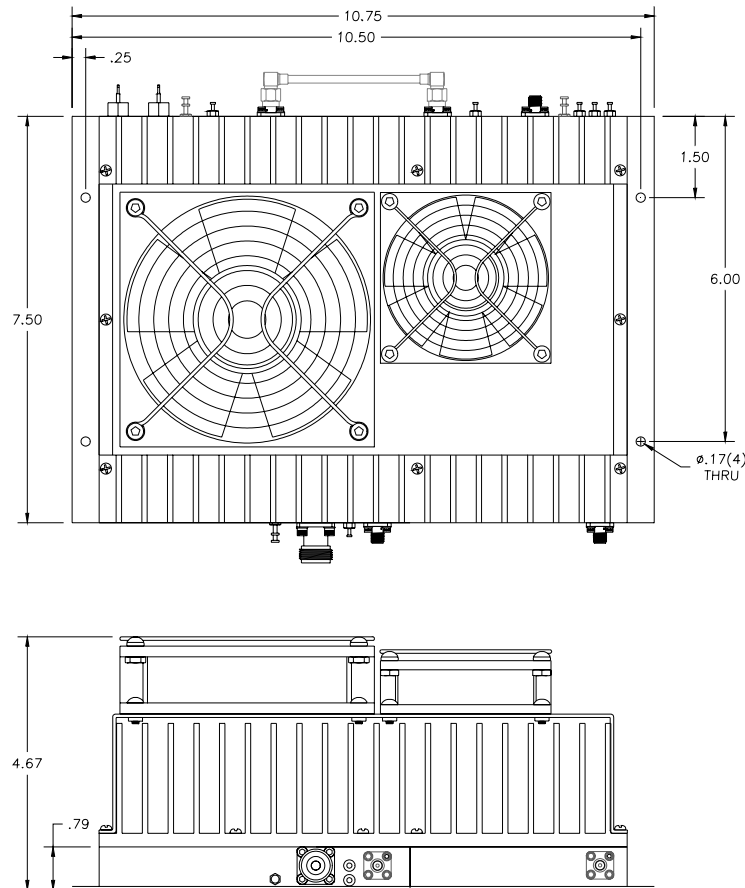
### Configurations

- Module
- 19" Rack



Parameter	Specification
Frequency Range	2.0 - 2.2 GHz
Pout (P1dB) - 0° to 55°C	+50 dBm
Third Order Intercept Point	+68 dBm (typ.)
Gain at Rated Power	59 dB $\pm$ 1 dB
Gain Flatness over Full Band	$\pm .5$ dB
Input/Output Return Loss	-14 dB / -14dB
DC Input Voltage	+12 Volts
DC Input Current, typ.	34 Amperes
Mechanical Dimensions (Including Heatsink and Fans)	10.75 x 7.5 x 4.7 inches
RF Connectors	Input - SMA Female, Output - N-Type 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 (Female SMA)	- 6 dBm, typical
RF OUT	Output Connector (N-Type Female)	+ 50 dBm @ P1dB
RF SAMPLE	Sample RF Port (Female SMA)	35.5 dB
GND	Ground Turret	---
REV	Reverse Power Detector	$\infty$ VSWR @ + 44 dBm $\approx$ + 1.5 Volts
FWD	Forward Power Detector	+ 44 dBm Output Power $\approx$ + 3.0 Volts
+12VDC	DC Input Voltage	+ 12 Volts @ 34 Amperes (typ.)
On/Off	TTL Logic On/Off	0 Volts = Off, +5 Volts = On

*Specifications subject to change without notice.*