

The **SM2122-52LD** is a 2.11 to 2.17 GHz LDMOS amplifier designed for the Universal Mobile Telecommunication Systems (UMTS) market. Its compact size and high linearity make it ideally suited for systems using 3G Point-to-Point or single carrier GSM. The amplifier meets the single carrier ETSI TS 125 104 V3.4 mask requirements with an output power of +39 dBm (min).



Features

- Single Power Supply
- Temperature Compensation

Options

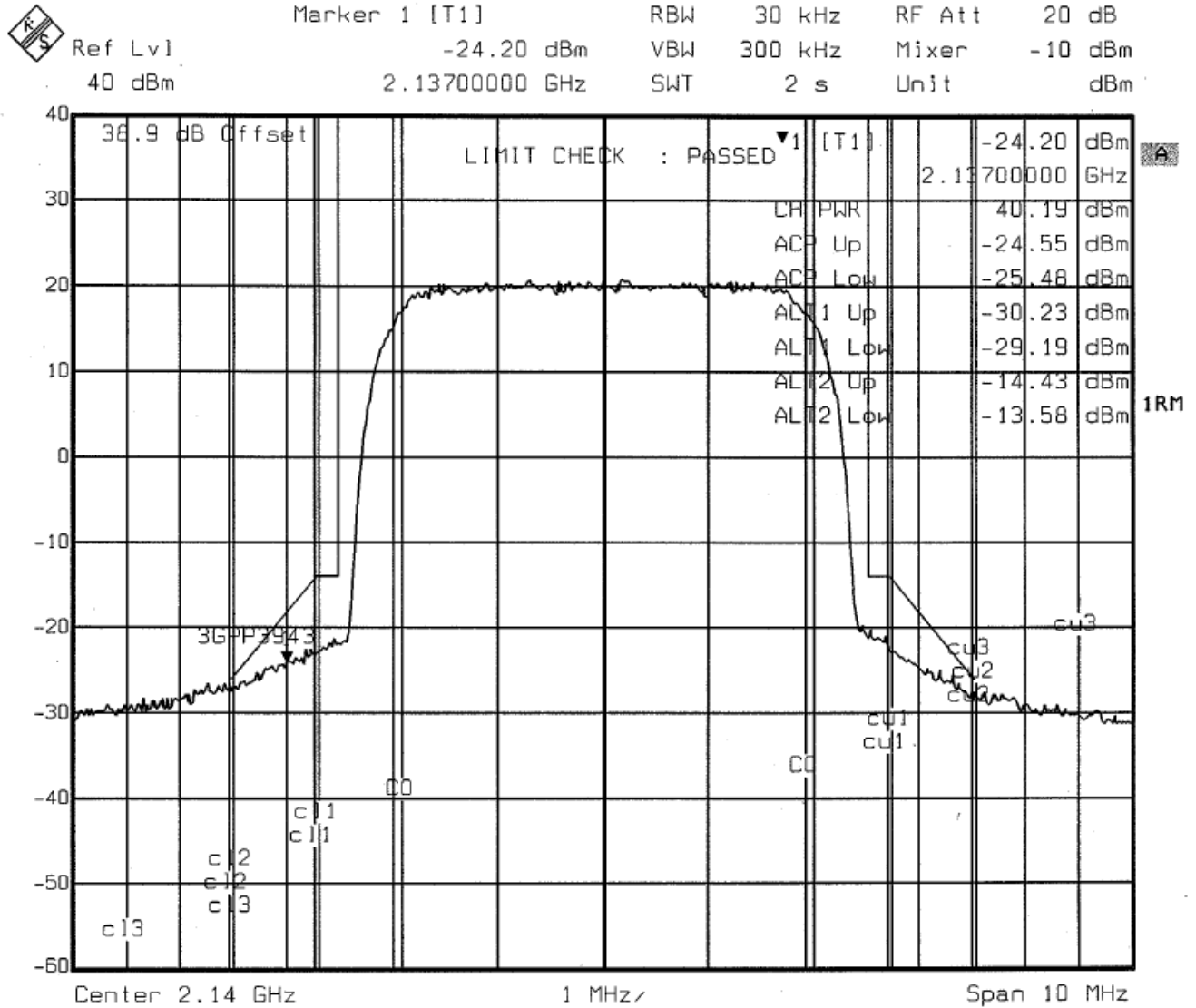
- Forward/Reverse Power Detection (AD8362 RMS Detectors)
- Thermal Detector
- High Speed Switching for TDD with 1 us rise/fall time
- Logic On/Off Control
- Integral Heatsink

Configurations

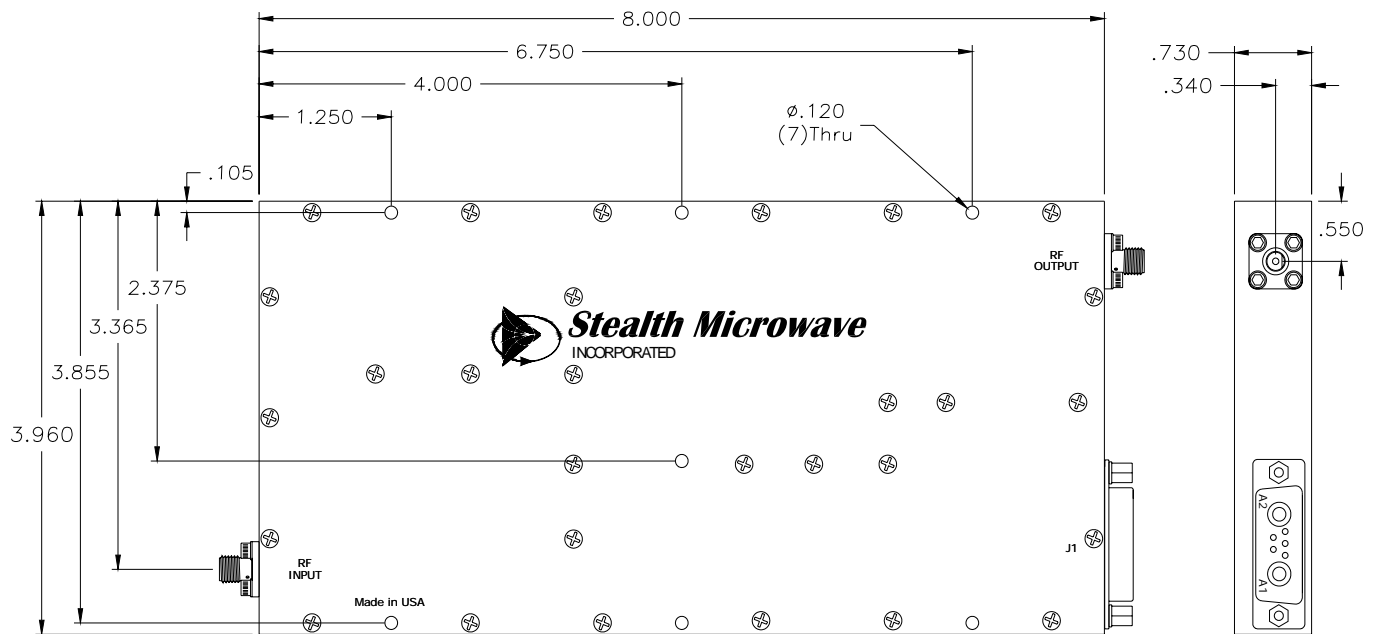
- Module
- 19" Rack

Parameter	Specification
Frequency Range	2.11 – 2.17 GHz
P1dB Power	+50.5 dBm (min.)
Linear Gain	45 dB \pm 1 dB
Gain Flatness over Full Band	\pm .5 dB
Input Return Loss	-18 dB
Output Return Loss (Built-in Isolator)	-18 dB
DC Input Voltage	+ 28 Volts
DC Current Quiescent	1.8 Amps
DC Current Operating	5.5 Amps @ + 39.0 dBm
Mechanical Dimensions (Without Heatsink)	8.0 x 4.0 x .73 inches
Weight (Without Heatsink)	1 lb. 8 oz.
RF Connectors	SMA Female
Operating Temperature	-30° C to +85° C
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level

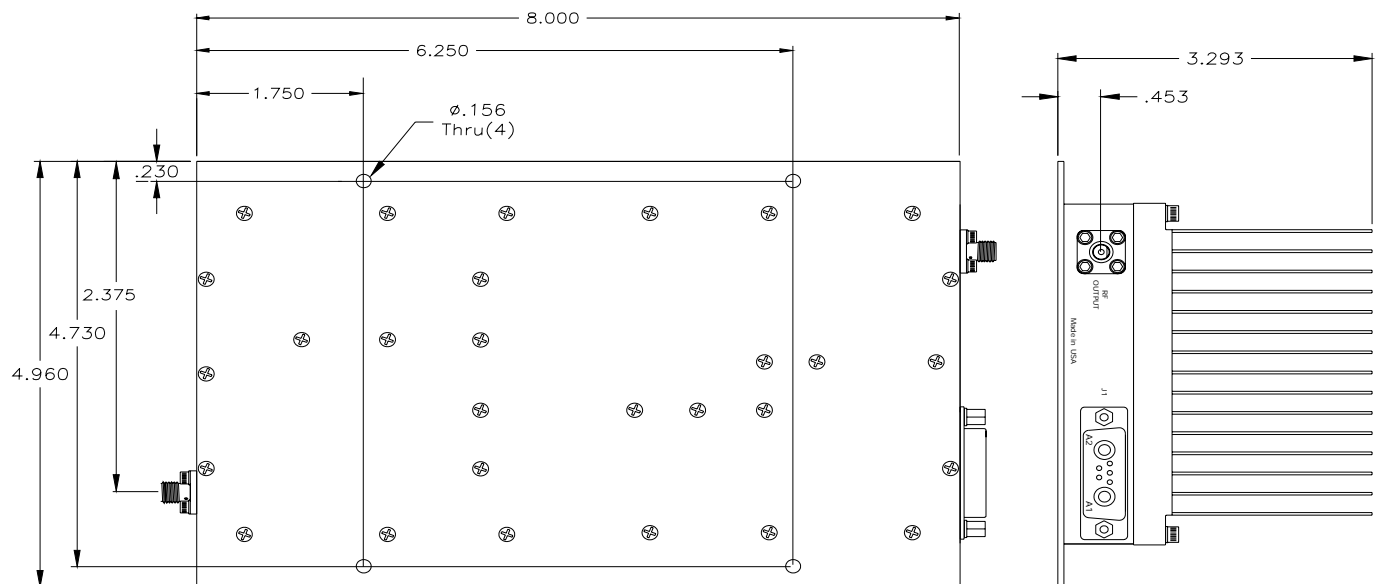
EMISSION MASK – SINGLE 3GPP CARRIER @ 39dBm Pout

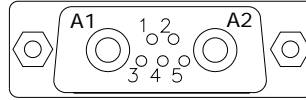


DIMENSIONS IN INCHES



HEATSINK OPTION





J1 CONNECTOR PINOUT

Pin	Description	Values
RF INPUT	Input Connector (SMA Female)	+8 dBm (max.)
RF OUTPUT	Output Connector (SMA Female)	+ 52 dBm @ P1dB (typ.)
A1	+VDC	+28V
A2	GND	--
1	TTL On/Off	+5V = on / 0V = off (if equipped)
2	Reflected power detection	Set to 3.35 V @ 40dBm of CW reflected power Detector Slope: 60 mV / dB
3	GND	--
4	Temp	Temp in deg C = (Voltage on pin - .500)*100 e.g. .90 V = 40 deg C
5	Forward Power Detection	Set to 4.00 V @ 52 dBm of CW output power into 50 Ω Detector Slope: 60 mV / dB