

The **SM08790-51LD** is an 870 - 900 MHz LDMOS amplifier designed for various military and commercial applications.

### Features

- Mis-Match Protected with Built-In Isolator
- Single Power Supply
- Temperature Compensation



### Options

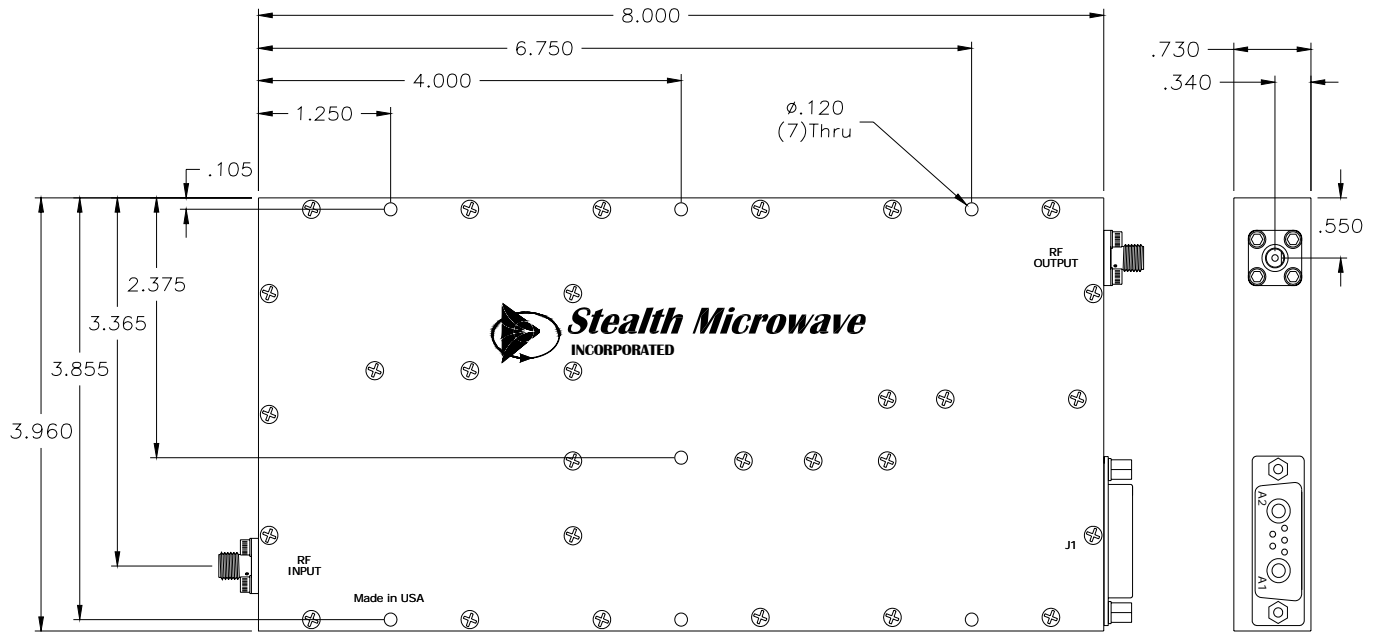
- Linear Forward/Reverse Power Detection (AD8362 Log amps)
- Temperature Monitor
- High speed Switching for TDD with 1 <math>\mu\text{s}</math> rise/fall time
- Logic On/Off Control
- Heatsink

### Configurations

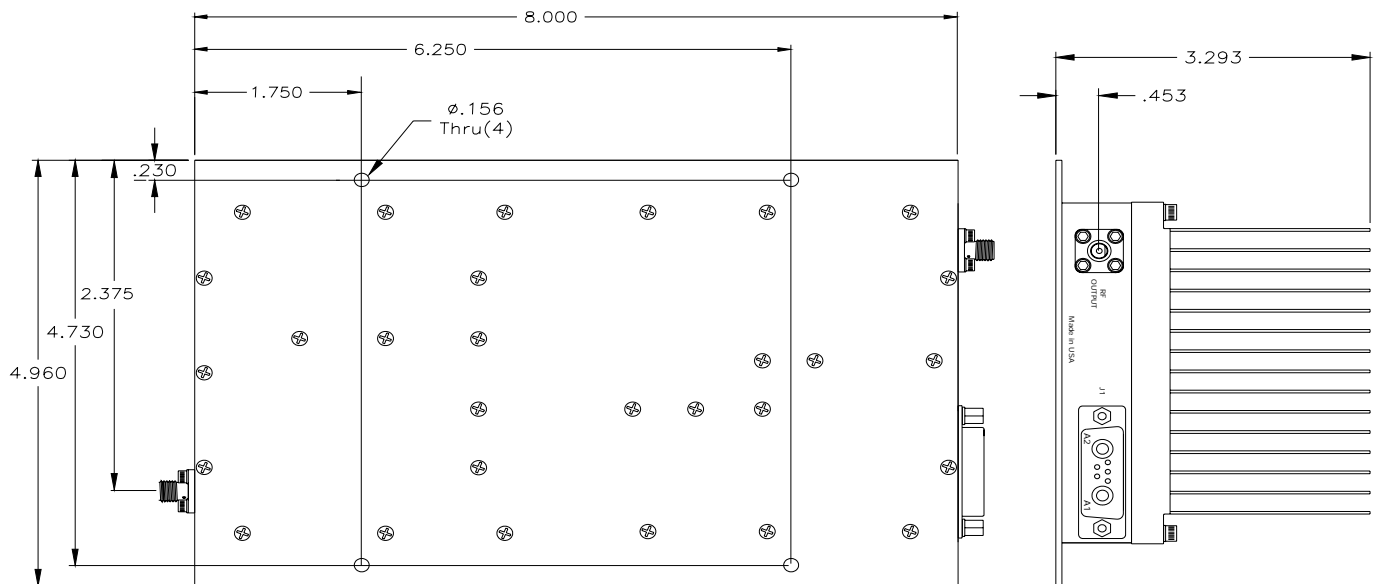
- Module
- 19" Rack
- Bench Top Lab Unit

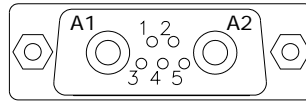
Parameter	Specification
Frequency Range	870 – 900 MHz
RF Power @ 1dB compression point	51 dBm
Linear Gain	45 dB $\pm$ 1 dB
Gain Flatness over Full Band	$\pm$ .5 dB
Input VSWR	-16 dB
Output VSWR (Built-in Isolator)	-16 dB
DC Input Voltage	+ 28 Volts
DC Current Operating	11A @ +51 dBm (max.) 2.5 A @ +37 dBm.
Mechanical Dimensions (Without Heatsink)	8.0 x 4.0 x .73 inches
RF Connectors	SMA Female
DC Connector	7W2 D-Sub
Operating Temperature (Baseplate)	-30° C to +85° C
Operating Humidity	95% Non-condensing
Operating Altitude	Up to 10,000 feet above Sea Level

**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)	+ 51 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 @ 51dBm of CW output power into 50 Ω Detector Slope: 60 mV / dB

### Current Draw vs. Power Out

