

The **SM1920-51LD** is a 1.93 to 1.99 GHz LDMOS amplifier designed for the Personal Communication Systems (PCS) market. Its compact size and high linearity make it ideally suited for systems using CDMA or single carrier GSM. The amplifier meets the single-carrier CDMA Spurious Emissions specification at +41.2 dBm. The Linear Gain is 45 dB, the VSWR is 1.3:1, and the DC supply is +28V / 4.85 A (operating).



### Features

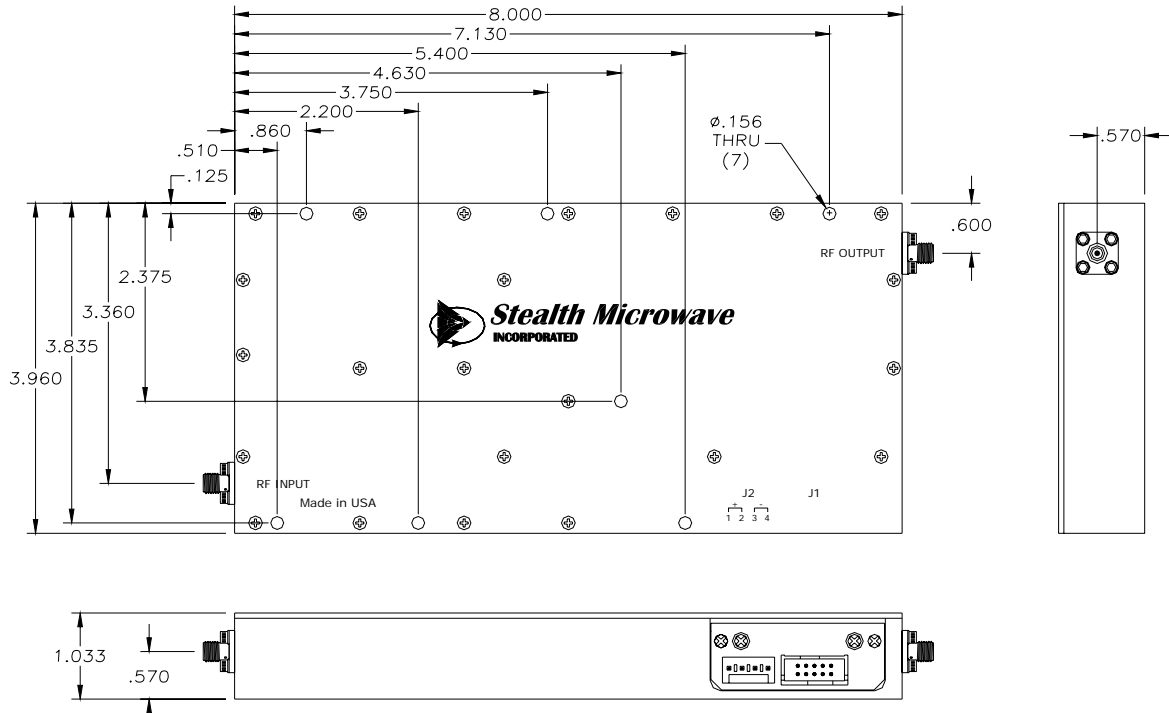
- Single Power
- Temperature Compensation

### Options

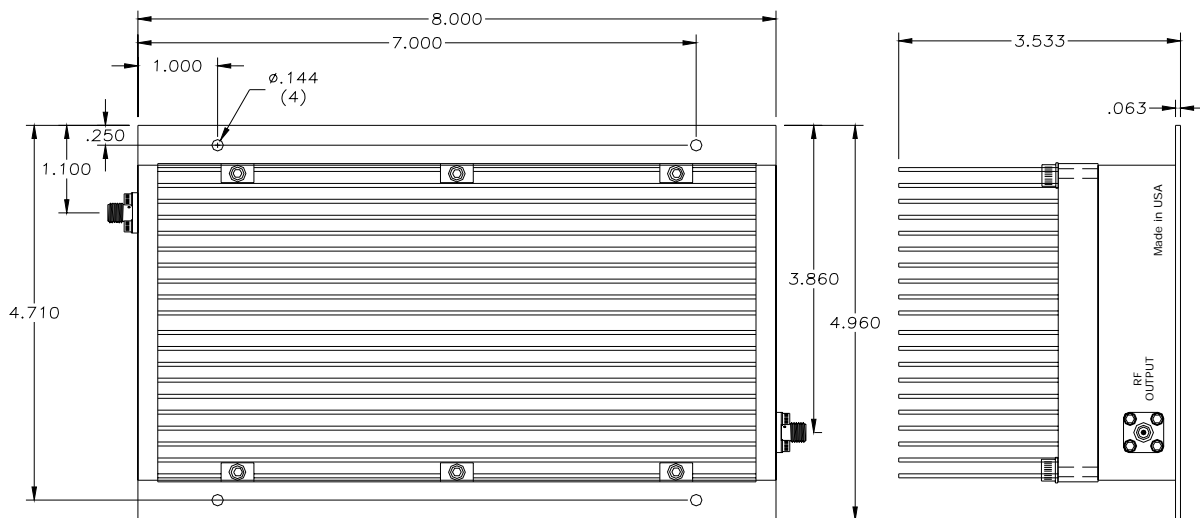
- Forward/Reflected Power Detection
- Temperature Sensing Alarm
- Current Alarm
- Logic On/Off Control
- Heatsink

Parameter	Specification
Frequency Range	1.93 – 1.99 GHz
In-Band Spurious Emissions at + 41.2 dBm with one CDMA	45 dBc/30 kHz @ $f_c \pm 885$ kHz @ + 40 ° C
Out of Band Spurious Emissions at + 41.2 dBm with 1 CDMA Carrier, <b>without</b> a duplexer.	-13 dBm/1 MHz @ $f_c \pm 2.75$ MHz @ + 40 ° C
Linear Gain	45 dB $\pm$ 1 dB (Can be changed up to 60 dB)
Gain Flatness over Full Band	$\pm .5$ dB
Input/Output Return Loss	-18dB / -18dB
DC Input Voltage	+ 28 Volts
DC Current Quiescent	2.85 Amps
DC Current Operating	4.85 Amps @ + 41.0 dBm
Mechanical Dimensions Without Heatsink	8.0 x 4.0 x 1.0
RF Connectors	Female SMA
Operating Temperature	-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**





Specifications subject to change without notice.

## Model SM1920-51LD

1930-1990 MHz

120 Watt Peak Power Amplifier

PCS APPLICATIONS

<b>DC Connector: 4 Pin Lock Header (J2)</b>		<b>Function</b>
Pins 1,2	Purple	Supply Voltage (+28V)
Pins 3,4	Black	GND (-)
<b>Alarm/Control Connector: 10 Pin Box Header (J1)</b>		<b>Function</b>
Pin 1	Orange/White	Alarm Summary
Pin 2	Black	GND
Pin 3	Gray	Forward Power Detection
Pin 4	Yellow/White	Vendor ID
Pin 5	Green	Logic On/Off (0V = On, 2V = Off)
Pin 6	Blue	Temperature Monitor
Pin 7	White	Reflected Power Detection
Pin 8	Brown/White	N/C
Pin 9	Brown	N/C
Pin 10	Black	GND

---

1007 Whitehead Road Ext., Trenton, NJ 08638

Tel: (609) 538-8586 ♦ Fax: (609) 538-8587

Email: sales@stealthmicrowave.com ♦ Web site: www.stealthmicrowave.com