

# CCM1095 20 TO 1000 MHz HIGH POWER AMPLIFIER

<i>Typical Values</i>	<b>CCM1095</b>
<b>High Output Power</b> .....	<b>+38 dBm</b>
<b>Broad Bandwidth</b> .....	<b>20-1000 MHz</b>
<b>High Third Order I.P.</b> .....	<b>+49 dBm</b>
<b>High Performance Thin Film for RF Section</b>	
<b>Includes Bias Sequencer</b>	

## SPECIFICATIONS\*

Parameter	Typical	Guaranteed		
		0 to 50° C	-55 to +85° C	
Frequency (Min.)		10-1200 MHz	20-1000 MHz	
Small Signal Gain (Min.)	11.3 dB	10.5 dB	10.0 dB	
Gain Flatness (Max.)	±0.5 dB	±0.7 dB	±0.8 dB	
Noise Figure (Max.)				
	50-100 MHz 100-1000 MHz	4.5 dB 4.0 dB	5.2 dB 4.7 dB	5.7 dB 5.2 dB
SWR (Max.)	Input/Output	1.7:1	2.0:1	2.0:1
Power Output (Min.) <sup>^</sup>				
	@ 1dB comp. 20-70 MHz	+37.0 dBm	+36.0 dBm	+35.5 dBm
	70-1000 MHz	+38.0 dBm	+37.0 dBm	+36.5 dBm
Reverse Isolation	18.0 dB	—	—	
DC Current (Max.)	500 mA	520 mA	530 mA	

\* Measured in a 50-ohm system at +36 Vdc unless otherwise specified.  
^ Output Power averages 1.5 dBm less using +28 Vdc.

## INTERMODULATION PERFORMANCE

<i>Typical @ 25° C</i>	<b>+28 Volts</b>	<b>+36 Volts</b>
<b>Second Order Harmonic Intercept Point</b> .....	+66 dBm	+64 dBm
<b>Second Order Two Tone Intercept Point</b> .....	+60 dBm	+58 dBm
<b>Third Order Two Tone Intercept Point</b> .....	+48 dBm	+49 dBm

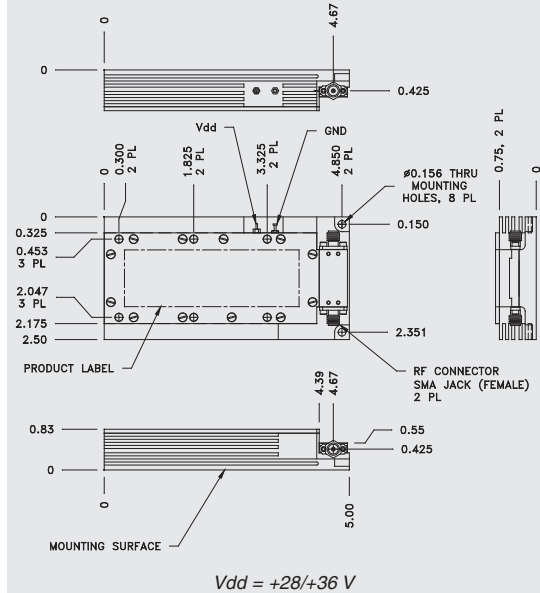
## ABSOLUTE MAXIMUM RATINGS

<b>Storage Temperature</b> .....	-65 to 150° C
<b>Maximum Case Temperature</b> .....	+125° C
<b>Maximum DC Voltage</b> .....	+40 Volts
<b>Maximum Continuous RF Input Power</b> .....	+30 dBm
<b>Maximum Short Term Input Power (1 Minute Max.)</b> .....	+33 dBm
<b>Maximum Peak Power (3 µsec Max.)</b> .....	+35 dBm
<b>Burn-in Temperature</b> .....	105° C
<b>Thermal Resistance<sup>1</sup> (θjc)</b> .....	+5 C/Watt
<b>Junction Temperature Rise Above Case (Tjc)</b> .....	+28 V
.....	+36 V
	+70° C
	+90° C

<sup>1</sup> Thermal resistance is based on total power dissipation.

## CCM1095

Power Amplifier, SMA with Sequencer



DIMENSIONS ARE IN INCHES (MILLIMETERS)

**TYPICAL PERFORMANCE**

