

EMD1211-D Driver Amplifier MMIC

DC-20 GHz GaAs MMIC Distributed Amplifier



Technical Characteristics

Product Features

- 10dB Gain @ 10 GHz
- +30.0dBm Min. Psat Output Power @ 2 GHz
- +12V @ 300 mA Typical Supply Voltage
- Typical Return Loss (dB): 14-18dB

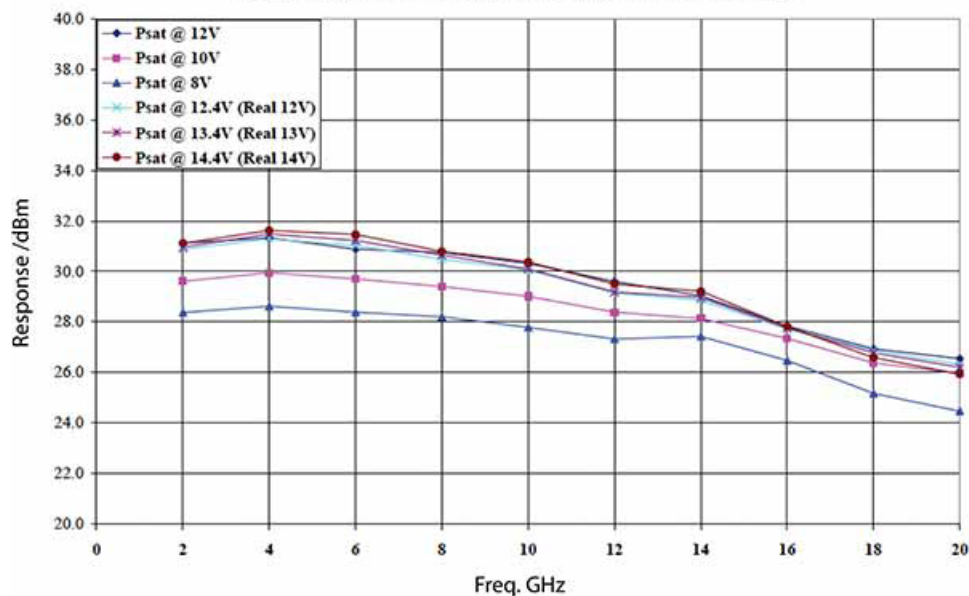
Product Description

EclipseMDI Products EMD1211-D, is a GaAs MMIC general purpose driver amplifier in die form operating from DC to 20 GHz. This MMIC amplifier is ideal for applications that requires a typical output power of +30.5 dBm @ 10 GHz, while requiring only 290mA from a + 12 volt supply. Gain flatness of this device is typically ± 1.0 dB from DC to 10 GHz.

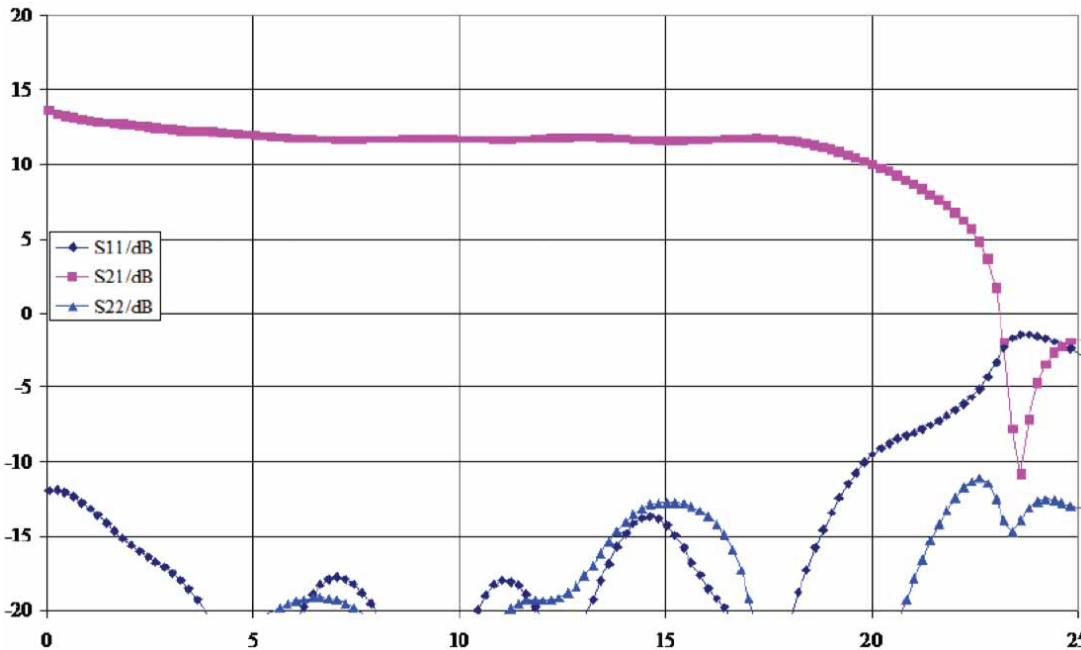


Parameters	Freq. (GHz)	Min.	Typical	Max.	Units
Gain	2.0		13.2		dB
	8.0		13.0		dB
	14.0		13.5		dB
	20.0		12.5		dB
Gain Flatness	DC to 10.0		± 0.80	± 1.0	dB
	10.0 to 20.0		± 0.50	± 0.8	dB
Gain Variation Over Temperature				0.005	dB/ $^{\circ}$ C
Noise Figure			6.5		dB
Input Return Loss			14.0		dB
Output Return Loss			18.0		dB
1dB Compression Point	2.0-6.0		28.0		dBm
	6.0-8.0		28.0		dBm
	8.0-14.0		27.5		dBm
	14.0-20.0		26.0		dBm
Saturated Output Power	2.0-6.0		31.0		dBm
	6.0-8.0		30.5		dBm
	8.0-14.0		28.5		dBm
	14.0-20.0		28.0		dBm
3rd Order Intercept Point	2.0		38.0		dBm
	8.0		38.0		dBm
	14.0		34.0		dBm
	20.0		32.0		dBm

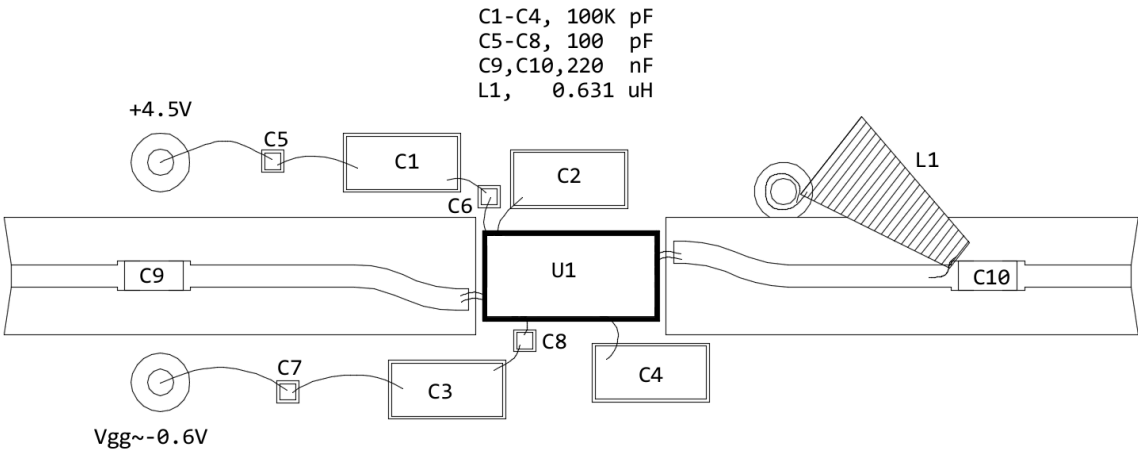
Power Data for 1211 Distributed Amplifier at over Vdd



1211-D in plastic - S-parameters



Assembly and Biasing Diagram



Outline Drawing

