

# EMD1211-D Driver Amplifier MMIC

DC-20 GHz GaAs MMIC Distributed Amplifier



## Technical Characteristics

### Product Features

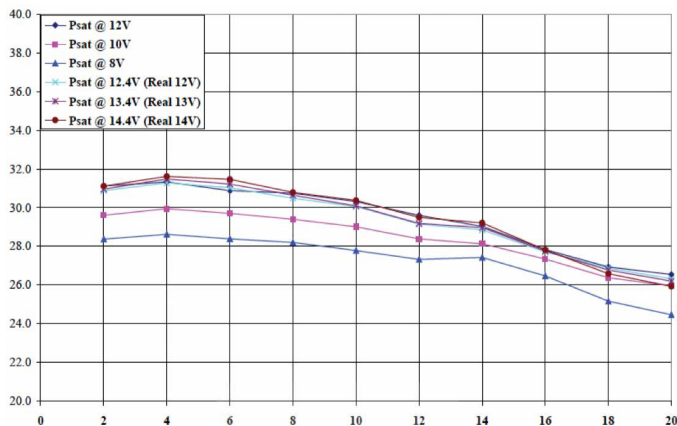
10dB Gain @ 10 GHz  
+30.0dBm Min. Psat Output Power @ 2 GHz  
+12V @ 300 mA Typical Supply Voltage  
Typical Return Loss (dB): 14-18dB

### Product Description

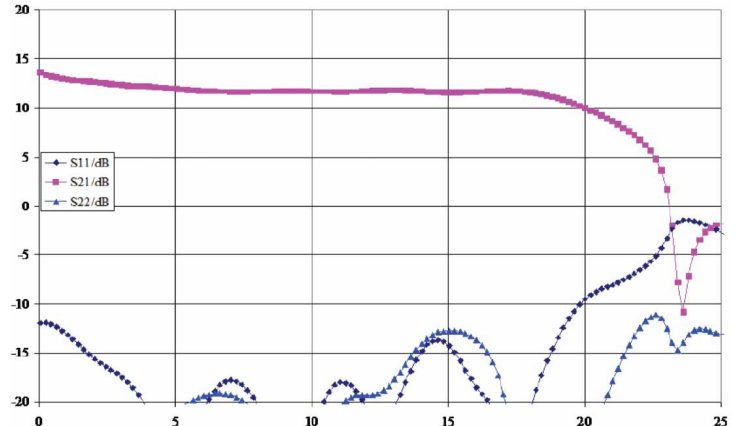
EclipseMDI Products EMD1211-PA is an GaAs MMIC general purpose driver amplifier in die form operating from DC to 20 GHz. This MMIC amplifier is ideal for applications that requires a typical output power of +30.5 dBm @ 10 GHz while requiring only 290mA from a + 12 volt supply. Gain flatness of this device is typically < ±1.0dB 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 GHz		±0.80	±1.0	dB
	10.0 to 20.0 GHz		±0.50	±0.8	dB
Gain Variation Over Temperature				0.005	dB/°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

Psat Data (dBm)



S-parameters



## About EclipseMDI

ECLIPSE Microdevices is located in San Jose, California. ECLIPSE has been developing high performance analog semiconductors for use in wireless radio frequency (RF), microwave, and millimeter wave for commercial and industrial applications. ECLIPSE has formed a strategic alliances - with foundries that features leading state-of-the-art process technologies and with manufacturing facilities for high-volume production of innovative RFIC's.

Outline Drawing

