

Multicarrier Amplifier Capabilities



Amplifiers up to 320W and 80 dB gain

Product Description

RF multicarrier amplifiers are pivotal in 5G systems and private networks, enabling efficient transmission of multiple signals simultaneously. These amplifiers enhance capacity by allowing the simultaneous amplification of multiple frequency channels, which is essential for supporting the high data rates and massive connectivity demands of modern applications like augmented reality and smart cities. This capability helps optimize bandwidth usage and improves overall network efficiency.

Typical Application

- 2G, 3G, 4G, 5G
- GSM, CDMA, LTE
- **Base Stations**
- Repeaters
- Communications Networks

Electrical Specifications ($T_A = 25^{\circ}$ C)

Features

- ▶ High Linearity
- GaN and LDMOS Technology
- Class D and Doherty designs
- Psat up to 320 Watts
- Thermal Management

Description	UOM	Min	Typical	Max	Notes
Frequency	GHz	.002		6.00	customer to define frequency band
Small Signal Gain	dB			+80	customer defined
Gain Flatness	±dB		TBD		bandwidth dependent
Gain Variation over Temp	±dB			3	
Saturate Power (Psat)	W			320	customer defined
Max Input Power	dBm			10	
Input Dynamic Range	dB	-40		9	customer defined
Harmonics	dBc			-20	
Rise/Fall Time	nS		10		
Spurious Out	dBc			-60	
Input VSWR	:1			1.5	
Output VSWR	:1			1.5	
Voltage Range	VDC	12		48	
Current	mA			TBD	dependent on Psat and VDC