Shanghai Tuyue Electronics Co. Ltd.
Solid State Broadband High Power Amplifier

BPA2326 - 20M | **2300 – 2600 MHz, 20 Watts**

The BPA2326-20M is suitable for broadband applications in the Cellular frequency range. This amplifier utilizes linear LDMOS power devices that provide excellent linearity and low distortions, high gain, and wide dynamic range. Exceptional performance, long term reliability, and high efficiency are achieved by employing advanced matching networks and combining techniques, EMI/RFI filters, machined housing, and qualified components.

- Solid-state linear design
- Small and lightweigh
- Suitable for Cellular Applications
- 50 Ohm Input/Output impedance
- High reliability and ruggedness

ELECTRICAL SPECIFICATIONS @ 24VDC, T=25°C, 50Ω System

Characteristics	Rating	Limit
Frequency Response	2300 - 2600MHz	Typ
RF Input Power Range	-3dBm to +3dBm	Typ
Power Output CW	20Watts Overall conditions	Min
Gain Window (Overall conditions)	43dB ±1dB within input dynamic range	Min
Gain Variation vs. Frequency	±0.8dB overall Frequency	Max
Gain Flatness over operating frequency range	±0.2dB over any 5MHz	Max
Gain variation over operating temperature range	±0.75dB	Max
Intermodulation Distortions	-20dBm with 2 - tones @ 20Watt output	Typ
Harmonics	2^{nd}: -20dBc, 3^{rd}: -20dBc	Max
Input/Output VSWR	1.5 : 1 (50 Ohm reference)	Max
Reverse IMD and Load VSWR	Output Isolator	
Conducted Emission	DC Power and Control line include RFI filters	
Output Protection	Infinite VSWR, all phases with forward output power up to 20Watts	Min
Load Stability	VSWR ∞ : 1, all phases	Nom
Supply Voltage (See Table below for other Voltages)	24VDC	Nom
Power Consumption @ Pout = 20W	100Watt	Typ

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ENVIRONMENTAL CONDITIONS

Operating Temperature	-20°C to +60°C	Min
Relative Humidity	0 to 90% Non-condensing	Min
Altitude	10,000 feet	Min
Shock and Vibration	Airborne	Min

MECHANICAL SPECIFICATIONS

Dimensions	157.4 x 99.2 x 23 mm	Max
Weight		Max
RF Connectors Input / Output	SMA female	
Interface (See Table below)	D-Sub, 9-Pins	
Cooling		

D-Sub, 9-Pin – Control

Pin #	Description	Specifications
1	Power detect output	If you need the power detecting
2	Output Power Contral	0 to 12 volts control voltage, and 0V is minimum attenuation
3	Over Temp Shutdown	5V is right, 0V is over heat; TTL: 85/°C shutdown, auto-restart @ 65/°C
4	+24V	
5	+24V	
6	GND	
7	GND	
8	GND	
9	+24V	

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