2-18GHz/20Watt/Module

Model Number: KB20180M43AV

The model KB20180M43AV is a high power amplifier operating between 2 GHz and 18 GHz and offering a wide dynamic range with 20 Watts typical saturated power. The employment of technology in manufacturing ensures this module state-of-the-art power performance with excellent power-to-volume ratio. It is ideal for jamming, EMC, test and measurement applications.

FEATURES:

- Small Size and Light Weight
- 50 Ohms Input and Output Matched
- Built-In Control and Protection Circuits, Including Over-Temperature Protection, Over-Current Protection , Over-Voltage Protection and Over- VSWR Protection.

ELECTRICAL SPECIFICATIONS @ +28.0VDC, 25°C, 50Ω

Parameter	Symbol	Min	Typ	Max	Units
Operating Frequency	BW	2		18	GHz
RF Output Power @Pin=0dBm	P_{SAT}		20		Watt
Power Gain @Pin=0dBm	Gp		43		dB
Power Gain Flatness @Pin=0dBm	Δ Gp		±2		dB
Input Return Loss	S_{11}			-10	dB
Harmonics @10W	H		-12		dBc
Spurious Signals	Spur		-55		dBc
Switch On/Off@10-90% Time,1kHz	$T_{ON/OFF}$		2	5	μS
In/Output Impedance	Impedance		50		Ω
Operating Voltage	V_{DC}	24	28	30	Volt
DC Current @20W	I_{DD}		7	8	Amp

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Notes
Dimensions	130x80x22[5.12x3.15x0.87]	mm [inch]	
Weight	0.8 [1.76]	kg [lbs]	Maximum
RF Connector Input	SMA, Female		
RF Connector Output	SMA, Female		
DC Interface Connector	D-Sub 9-Pin,Male(with mating connector)		
Cooling	External Heatsink Required(Not Supplied)		

ENVIRONMENTAL CHARACTERISTICS (Design to Meet)

Parameter	Min	Typ	Max	Units	Notes
Ambient Temperature	-40		60	°C	Operating case temperature up to +85°C
Non-operating Temperature	-45		85	°C	Storage
Relative Humidity (non-condensing)			95	%	

ABSOLUTE MAXIMUM RATING

Input RF drive level without damage	+5 dBm (Max)
Load VSWR @ P_{OUT} =10W	3:1 @ all load phase & amplitude continuous More than 4:1 may cause PA shutdown
Over Temperature	95°C @ heatsink [restored @ 60°C]

Focus on Your Application

Chengdu KeyLink Wireless Technology Co., Ltd.

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Specifications subject to change without notice

2-18GHz/20Watt/Module

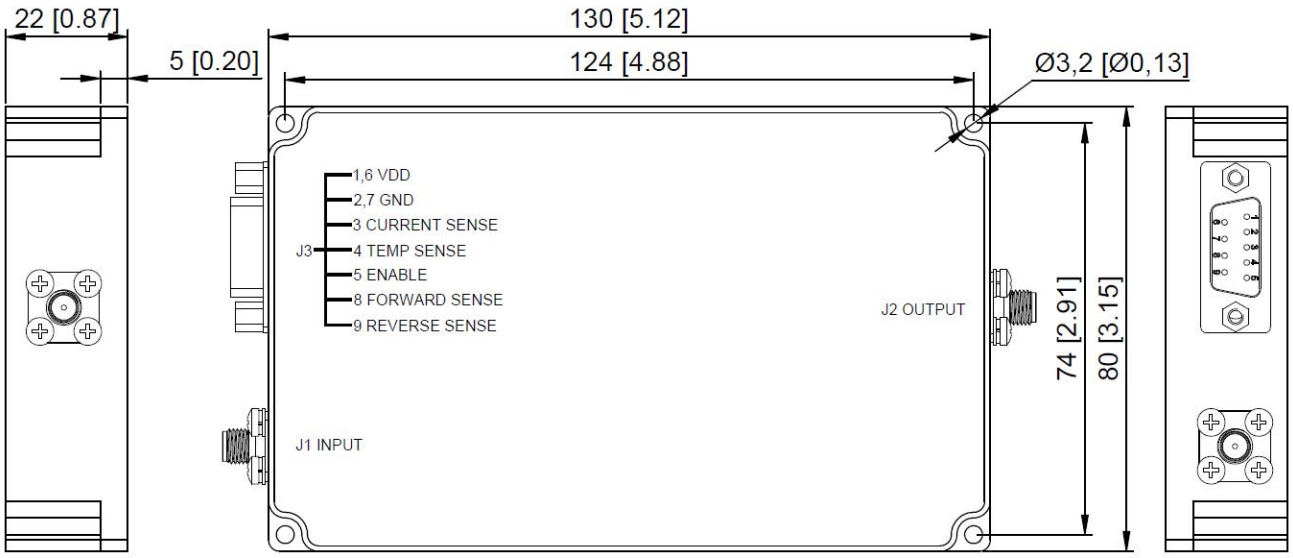
Model Number: KB20180M43AV

DC INTERFACE CONNECTOR

Pin #	Description	Specifications
1, 6	VDD	+28.0 V_{DC}
2, 7	GND	Ground
3	CURRENT SENSE	Analog voltage relative to I_{DD} @ 100mV per Ampere
4	TEMP SENSE	Analog voltage relative to Module's Temperature @ 0.5V+10 mV/°C
5	ENABLE	Amplifier Enable: TTL Logic High (3.3V~5V) (Internally Pulled-Low)
8	FORWARD SENSE	Analog voltage relative to forward power level
9	REVERSE SENSE	Analog voltage relative to reflected power level

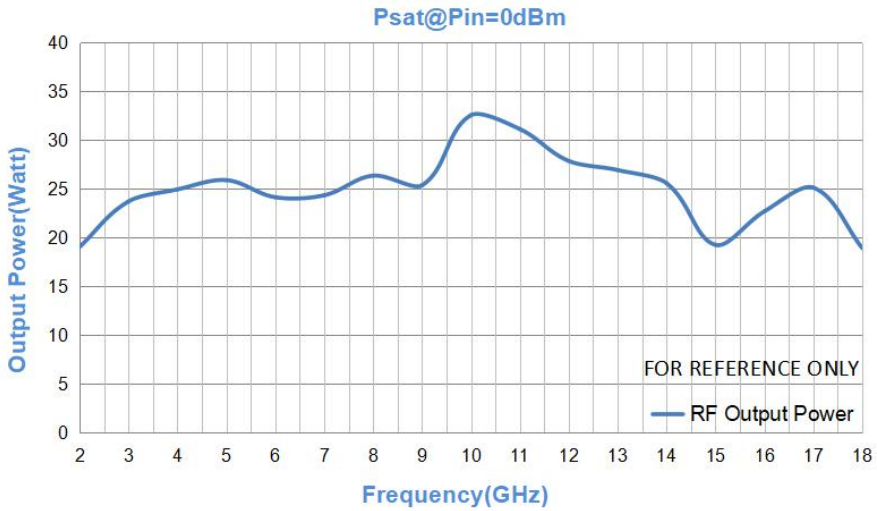
***If you need RS422 or RS485, please contact the sales for customization.**

OUTLINE DRAWING (All dimensions in mm [inch]) (FOR REFERENCE ONLY)



TYPICAL PERFORMANCE PLOTS (FOR REFERENCE ONLY)(Please contact the sales for special requirements)

Output Power (Normal temp. +25±3℃)



Note: Adequate heatsink required.

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