



MODEL KMW2025
100/200 WATTS CW
500 WATTS PULSE
30 MHz - 512 MHz

The Model KMW2025 is an RF power amplifier module for OEM applications or integration into a user system. The module comprises a printed wiring assembly housed in a machined aluminum enclosure with DB-9 for DC feed and controls for connection to the DC power source. Multi-stage blanking is incorporated for minimum broadband noise when unkeyed. Gain control function could be used separately or incorporated in external ALC loop. Cooling requirements defined by the data provided below and protection of the output devices against output mismatch are the responsibility of the user.

Specifications			
Power CW	100W @ 28.6V	200W @ 34.6V	500W @ 44.6V Pulse 1 mS/10%
Frequency Range	30-512 MHz	100-512 MHz	100-500 MHz
Current CW Avg	10A	14A	7A
Gain	53 dB min		
Flatness	±1.5 dB typical		
AM Distortion 5% max (input AM distortion 0.5% max)	@ 30W +90% modulation Better than 5%	@ 50W +90% modulation Better than 5%	TBD
IMD Distortion @ 0.2 MHz spacing	25W x 2 35 dBc Avg. 24 dBc max	50W x 2 35 dBc Avg. 24 dBc max	125W x 2 30 dBc Avg. 24 dBc max
Harmonics	2 nd 35 dBc Avg. (20 dBc max)		2 nd 40 dBc Avg. (23 dBc max)
	3 rd 25 dBc Avg. (13 dBc max)		3 rd 30 dBc avg. (13 dBc max)
Broadband Noise	-114 dBm/Hz Avg.		
On/Off Ratio	-80 dBc max		
On/Off Time with Delay	60 µSec max		
Operating Temp @ Enclosure	-10/+55°C		
Shutdown Temp @ Enclosure	+90°C		



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Interface/Connector		
Input/Output RF		SMA
DC Feed	Pin 1, 2, 3 to -DC/ground Pin 7, 8, 9 to +DC	Filtered 9-pin D-Sub
On/Off Control (REQUIRED 20 mA source)	Pin 4	0.5V or ground = OFF ≥ 4V or not connected = ON
Over-Temp Status	Pin 5	≥ 4V normal 0.5V Over-Temp
* Gain Control range 20 dB min with indefinite resolution	Pin 6	20V-24V for max Gain
<p>* Option 1: Use external 0-20 VDC Source at Pin 6..</p> <p>* Option 2: Use 1K Ohm Potentiometer, Feed from Pin 9 (≈ 28 VDC) with Wiper at Pin 6.</p> <p>* Option 3: If Gain Control will not be used; Solder 100 Ohm Resistor between Pin 6 and Pin 9 of DB-9 connector.</p>		

Model Options		
Model	Heatsink	Dimensions (H x W x D) inches
KMW2025	None	1.20 x 4.55 x 6.25
KMW2025M1	Yes	2.99 x 5.09 x 10.00

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