



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 feed-through capacitive terminals 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. The unit features input protection up to 1 Watt. 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) 3 rd 25 dBc avg (13 dBc max)		2 nd 40 dBc avg (23 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		

Interface/Connector		
Input/Output RF	SMA	
Power/Control	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
Overtemp Status	Pin 5	≥ 4V normal ≤ 0.5v overtemp
Gain Control range 20 dB min with indefinite resolution	Pin 6	20V-24V for max gain



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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
KMW2025M2	Integrated	2.25 x 4.55 x 6.32

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