



**MODEL KMW2040-M17
100 WATTS CW
225 MHz - 400 MHz**

The Model KMW2040-M17 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 a 9-pin Molex connector for connection to the DC power source. Cooling requirements are defined by the data provided below.

GENERAL SPECIFICATIONS

The general specifications listed below apply at 100W unless otherwise noted.

FREQUENCY RESPONSE	225 to 400 MHz
POWER OUTPUT @ 1db COMPRESSION.....	100 Watts (minimum, with filter / cables)
INPUT FOR RATED OUTPUT	3 dBm maximum
GAIN	225 to 400MHz = 50 – 54 dB 290 to 320MHz = 51.5 – 52.5 dB
HARMONIC DISTORTION.....	- 70 dBc maximum (with filter)
INTERMODULATION DISTORTION @ 0.2MHZ SPACING	- 26 dBc average / - 20 dBc maximum
BROADBAND NOISE @ 1MHZ BW	- 120 dBm / Hz maximum
INPUT VSWR.....	2:1 maximum
MISMATCH TOLERANCE	2:1 @ rated power / 6:1 without Damage
SPURIOUS (0.2-10MHZ BEYOND FUNDAMENTAL)	- 80 dBc maximum
PRIMARY POWER	28 Vdc @ 9.5A avg / 11A max / 350mA = Off
ON/OFF RATIO.....	≥ 80dBc



CONTROL INTERFACE (9-PIN MOLEX)

PIN 1 (VSWR)	Limit output power when load exceed 3:1 @ 290-320MHZ (4:1 @ 225-400MHZ) Status will be ≤ 0.7 V (≥ 2.5 V Normal)
PIN 2 (ALC)	ALC circuitry limits PEP to 130 W \pm 0.5 dB over 290 to 320 MHz and 130 W \pm 1.0 dB over 225 to 400 MHz (exclusive of 290 to 320 MHz) ALC pin status: <ul style="list-style-type: none">• ≥ 2.5 V when ALC circuitry not active (normal operation, PEP ≤ 130 W)• ≤ 0.7 V when ALC circuitry active (PEP = 130 W, input limited by 2 dB or more)
PIN 3 (ON / OFF)	≤ 0.7 V = Off ≥ 5 V or no connection = On (30 μ sec maximum)
PIN 4 (OVERTEMP 80°)	Shut-off amplifier @ 80°C Enclosure Status will be ≤ 0.7 V (≥ 2.5 V Normal)
PIN 5 (FAN CONTROL 50°C)	Pin will go to ground (8A capability) when enclosure reach 50°C
PIN 6 & 7 (DC)	+ 28 V
PIN 8 & 9 (DC)	- 28 V (Ground)

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