

MODEL KMS1030
5 Watts
500 – 2700 MHz

The Model KMS1030 is a broadband Solid-State GaAsFET power amplifier module built to cover most of UHF, L and the S bands for general applications requiring instantaneous ultra broadband. This 37dBm linear power amplifier has a minimum gain of 45 dB and is designed to meet all types of modulation protocols. The high reliability and efficiency that are built into this module, plus the light weight and protection makes it suitable for military and test applications. The module comprises a printed wiring assembly housed in a machined aluminum enclosure. Cooling requirements are defined by the over-temperature shutdown limits listed below.

The amplifier is protected from thermal overload, over power, over voltage or wrong voltage polarity as well as having an internal isolator.

SPECIFICATIONS

FREQUENCY RANGE.....	500 - 2700 MHz
GAIN	45 dB minimum
GAIN FLATNESS	± 1.5dB
GAIN VARIATION OVER TEMPERATURE	± 1.5dB minimum
OPERATION TEMPERATURE	0 – 60 Deg C
P1 dB	37dBm minimum
OVER-POWER SHUTDOWN	40dBm ± 0.5dBm
IP3 @ 37dBm OUTPUT POWER.....	54dBm minimum
INPUT/OUTPUT IMPEDANCE.....	50 Ohms
HARMONICS 2ND AND 3 RD	Better than -30dB @ P1 dB
NOISE FIGURE.....	Better than 10 dB
OUTPUT/INPUT RETURN LOSS	> 15dB
POWER SUPPLY	12 Vdc
DC CURRENT.....	8A Maximum
RF CONNECTORS	SMA Female
DC / INTERFACE CONNECTOR.....	D-SUB Combo
MECHANICAL DIMENSIONS (L X W X H).....	10.5" X 5" X 1" (Excluding heatsink)

FUNCTIONS

TEMPERATURE SHUTDOWN.....	Mute @ ≥ 55 ± 5 Deg. C (Restart @ 45 Deg. C ± 5 Deg. C)
OVER-TEMPERATURE ALARM (PIN 3).....	≥ 50 Deg. C = TTL High
OVER POWER SHUT DOWN / ALARM (PIN 1)	Ground
INTERFACE GROUNDING PIN	PIN 5

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