



MODEL KMA4040
400 WATTS PEP
30 MHz – 40 MHz

The Model KMA4040 is an RF power booster amplifier for use with tactical VHF transceivers in the band 30 to 40 MHz and with output powers of 1 to 5 W similar to the AN/PRC-117F. The booster amplifier is comprised of an ALC controlled power amplifier, VSWR monitor with power fold back, TTL logic Keying circuitry and an internal regulated dc to dc power supply system. The booster amplifier incorporates coaxial relays to provide transmit to receive switching and is keyed by a TTL logic input signal. Cooling of the unit includes internal heat sinking and fans with over temperature protection. The booster is comprised of a rugged splash proof housing with front mounted RF input and output connections, on/off power switch and DC power/Logic connections.

SPECIFICATIONS

RATED POWER OUTPUT	400 Watts PEP
INPUT FOR RATED OUTPUT	1 to 5 Watts maximum
CLASS OF OPERATION	Class AB
FLATNESS.....	± 1 dB
FREQUENCY RESPONSE	30 MHz – 40 MHz
INPUT IMPEDANCE	50 Ohm nominal ≤ 1.5:1
OUTPUT IMPEDANCE	50 Ohm nominal
MISMATCH TOLERANCE	3:1 before VSWR power fold-back
INTERMODULATION (2 X 100W Tones).....	-30 dBc
NOISE PERFORMANCE	-110 dBm/Hz maximum
HARMONIC DISTORTION.....	-15 dBc without filtering
SPURIOUS EMISSIONS.....	-60dBc
RF BYPASS / RX LOSS.....	< 1 dB
TX/RX SWITCHING TIME.....	30ms typical via coaxial relay system
PRIMARY POWER	22 to 28V @ 1100VA
RF CONNECTORS	BNC female in, N female out
GROUNDING	Single bonding post per D-069879-001
TEMPERATURE RANGE	0 - 125°F with internal forced air cooling
PHYSICAL DIMENSIONS.....	Per RFQ doc outline drip proof per MIL810E 506.3 Proc.II
WEIGHT.....	Less than 45 lbs.
HIGH TEMPERATURE ALARM.....	80° C
OVERTEMPERATURE SHUTDOWN.....	90° C
CONTROL & MONITOR	Via integrated RS485 serial interface

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