



MICROWAVE POWER MODULE

M61-100Ku Airborne 100 Watts Ku Band

RF Specifications

Operating frequency ranges..... 13.75 to 14.5 GHz
 Rated power..... +49.5 dBm, min.
 Gain at rated power..... 36.5 dB, min.
 Input power..... +13 dBm, max.
 Second harmonics -10 dBc, max.
 Gain slope 0.1 dB/MHz, max.
 Gain variation 2.0 dB
 Gain stability (over 24 hrs.) ±0.5 dB

Intermodulation (2 equal carriers, 5 MHz apart)

At -1.5 dB backoff -13 dBc
 At 3 dB backoff -16 dBc
 AT 6 dB backoff -22 dBc

AM to PM Conversion

At rated power 6° per dB
 At 6 dB below rated power 3° per dB

Group Delay

Linear delay 0.01 ns per MHz, max.
 Parabolic delay 0.005 ns per MHz²
 Ripple (36 MHz band)..... 0.5 ns, peak-to-peak

Residual AM/FM

500 Hz to 50 kHz -40 dBc
 50 kHz to 500 kHz -20(.3 + log F[kHz]) dBc
 Above 500 kHz -60 dBc
 Spurious output..... -60 dBc , max.

Input VSWR 1.25:1, typ.
 Output VSWR (non-operating)..... 2.0:1, typ.
 Continuous load VSWR 1.2:1, 2.0:1, max.

Electrical Interface

Prime power 115/208 VAC, 3 phase, ±15%
 Frequency 400 Hz
 Power consumption 400 W, max.
 Power factor 0.92 typ
 Power connector D38999/24WD05PN
 User interface connector D38999/24WD35SN
 RF input connector SMA female
 RF output flange WR-75 cover flange

Environmental Requirements

Ambient temperature -55 to +85°C,
 operational (baseplate)
 Altitude 0 to 60,000 ft.
 Humidity 100%, condensing
 Shock and vibration Airborne
 Salt atmosphere As encountered outdoors
 in coastal areas
 Cooling Forced Air

Note: Unit does not incorporate fans or blowers.

Mechanical Specifications

Dimensions

Length (inches/mm) 12.44/316
 Height (inches/mm) 4.88/124
 Width (inches/mm) 7.60/198
 Weight (Lbs.) 17.6 max

Keltec, 84 Hill Avenue, Fort Walton Beach, Florida 32548
 (850)-244-0043 - FAX (850)-664-0546 - e-mail: sales@keltec.sigtech.com

Specifications subject to change without notice