

MODEL CWM2055

150 Watts

640 – 810 MHz

The Model CWM2055 is a broadband linear high power amplifier suitable for HDTV applications. This high efficient (better than 20%) power amplifier is designed with the latest generation of LDMOS devices and exceptional RF circuitry that provides high linearity, good dynamic range, broadband matching and unconditional stability. This 150 Watts linear power amplifier has a minimum gain of 55dB and is suitable for 8VSB and other types of modulation protocols. The Power Amplifier is protected from infinite VSWR, over power and temperature and all necessary controls and alarm that is required in modern communication system.

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.

SPECIFICATIONS

FREQUENCY RANGE.....	640 - 810 MHz
GAIN	55 dB minimum
GAIN FLATNESS	± 1dB
GAIN VARIATION OVER TEMPERATURE	± 1.5dB minimum
OPERATION CASE TEMPERATURE.....	0 – 60 Deg C
P1 dB	52dBm minimum
OVER-POWER SHUTDOWN.....	52.5dBm ± 0.5dBm
IP3 @ 150 W OUTPUT POWER	63dBm minimum
8VSB SIGNAL @ 150W OUT PUT POWER.....	-40dBc
INPUT/OUTPUT IMPEDANCE.....	50 Ohms
HARMONIC DISTORTION	Better than -25dB @ P1 dB
NOISE FIGURE.....	Better than 8
OUTPUT/INPUT RETURN LOSS	> 15dB
POWER SUPPLY	32Vdc
DC CURRENT.....	20 MAX
RF CONNECTORS.....	Type N Female
DC / INTERFACE CONNECTOR.....	D-SUB Combo
MECHANICAL DIMENSIONS (L X W X H).....	10.5" X 7" 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
VSWR ALARM (PIN 4)	
INTERFACE GROUNDING PIN.....	PIN 5

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