

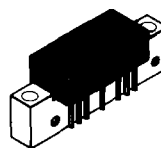
The RF Line
Low Distortion Wideband
Reverse Amplifier Modules

Designed specifically for broadband applications requiring low distortion characteristics. Specified for use as return amplifiers for low-split 2-way cable TV systems. Features all gold metallization system.

- Guaranteed Broadband Power Gain
- Guaranteed Broadband Noise Figure
- Superior Gain, Return Loss and DC Current Stability with Temperature
- All Gold Metallization
- Circuit Design Optimized for Good RF Stability Under High VSWR Load Conditions
- Transformers Designed to Insure Good Low Frequency Gain Stability versus Temperature

MHW1184L
MHW1224L
MHW1254L
MHW1304L

24 Vdc
50 MHz
18/22/25/30 dB
CATV LOW CURRENT AMPLIFIER



CASE 714-06, STYLE 1

MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
DC Supply Voltage	V _{CC}	+28	Vdc
RF Input Voltage (Single Tone)	V _{IIN}	+70	dBmV
Operating Case Temperature Range	T _C	- 20 to +100	°C
Storage Temperature Range	T _{stg}	- 40 to +100	°C

ELECTRICAL CHARACTERISTICS (V_{CC} = 24 Vdc, T_C = 30 °C, 75 ohm system, unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Bandwidth All	BW	5.0	50	MHz
Power Gain (f = 5.0 MHz)	MHW1184L MHW1224L MHW1254L MHW1304L G _p	18.0 21.4 24.3 29.2	19.0 22.7 25.8 30.8	dB
Return Loss (@ f = 5.0-50 MHz)	MHW1184L, MHW1224L, MHW1254L MHW1304L RL	20 18	—	dB
Second Order Distortion (V _{out} = +50 dBmV/ch)	All IMD	—	-70	dBc
Cross Modulation (V _{out} = +50 dBmV/ch)	MHW1184L MHW1224L MHW1254L MHW1304L XMD ₄	— — — —	-64 -63 -62 -57	dBc
Triple Beat Distortion (V _{out} = +50 dBmV/ch)	MHW1184L MHW1224L MHW1254L MHW1304L TB ₃	— — — —	-73 -72 -70 -66	dBc
Noise Figure (f = 50 MHz)	MHW1184L, MHW1224L MHW1254L, MHW1304L NF	— —	5.0 4.5	dB
DC Current All	IDC	100	135	mA