

The RF Line

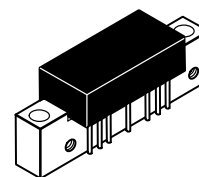
Low Distortion Wideband Reverse Amplifier Modules

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

MHW1304L

24 Vdc
50 MHz
30 dB
CATV LOW CURRENT AMPLIFIER



CASE 714-06, STYLE 1

MAXIMUM RATINGS

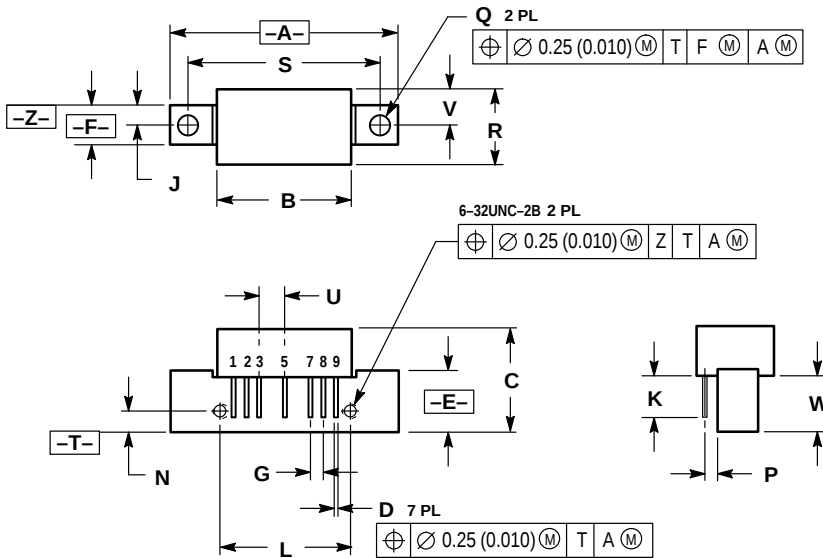
Parameter	Symbol	Value	Unit
DC Supply Voltage	V_{CC}	+28	Vdc
RF Input Voltage (Single Tone)	V_{IN}	+70	dBmV
Operating Case Temperature Range	T_C	- 20 to +100	°C
Storage Temperature Range	T_{stg}	- 40 to +100	°C

ELECTRICAL CHARACTERISTICS ($V_{CC} = 24$ Vdc, $T_C = 30^\circ\text{C}$, 75 ohm system, unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Bandwidth All	BW	5.0	50	MHz
Power Gain (f = 5.0 MHz)	Gp	29.2	30.8	dB
Return Loss (@ f = 5.0–50 MHz)	RL	18	—	dB
Second Order Distortion ($V_{out} = +50$ dBmV/ch)	IMD	—	-70	dBc
Cross Modulation ($V_{out} = +50$ dBmV/ch)	XMD ₄	—	-57	dBc
Triple Beat Distortion ($V_{out} = +50$ dBmV/ch)	TB ₃	—	-66	dBc
Noise Figure (f = 50 MHz)	NF	—	4.5	dB
DC Current	I_{DC}	100	135	mA

(Replaces MHW1184L/D)

PACKAGE DIMENSIONS



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	—	1.775	—	45.08
B	—	1.085	—	27.56
C	—	0.840	—	21.34
D	0.018	0.022	0.46	0.56
E	0.465	0.510	11.81	12.95
F	0.300	0.325	7.62	8.25
G	0.100 BSC	—	2.54 BSC	—
J	0.156 BSC	—	3.96 BSC	—
K	0.315	0.355	8.00	8.50
L	1.00 BSC	—	25.40 BSC	—
N	0.165 BSC	—	4.10 BSC	—
P	0.100 BSC	—	2.54 BSC	—
Q	0.148	0.168	3.76	4.27
R	—	0.595	—	15.11
S	1.500 BSC	—	38.10 BSC	—
U	0.200 BSC	—	5.08 BSC	—
V	0.280 BSC	—	7.11 BSC	—
W	0.435	0.450	11.05	11.43

STYLE 1:

- PIN 1. RF INPUT
- GROUND
- GROUND
- DELETED
- VDC
- DELETED
- GROUND
- GROUND
- RF OUTPUT

CASE 714-06 ISSUE K

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