

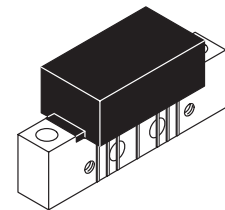
## The RF Line Low Distortion Wideband Reverse Amplifier Module

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 Ensure Good Low Frequency Gain Stability versus Temperature

**MHW1304L**

**30 dB  
 50 MHz  
 24 Vdc  
 CATV LOW CURRENT AMPLIFIER**



CASE 1302-01, 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)	$G_p$	29.2	30.8	dB
Slope (f = 50-65 MHz)	S	-0.2	—	dB
Return Loss (@ f = 5.0-50 MHz) (@ f = 65 MHz)	RL	18 16	— —	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



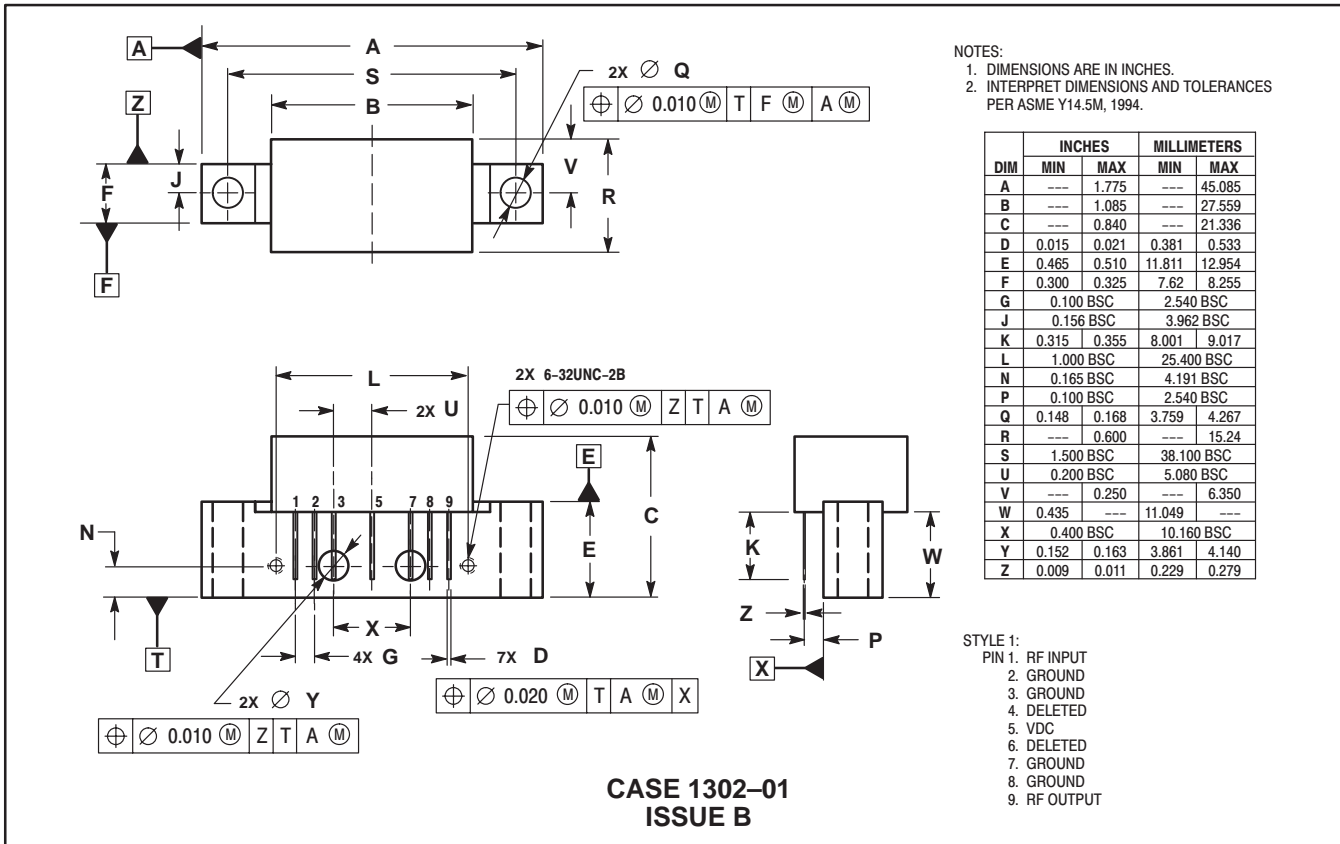
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## PACKAGE DIMENSIONS



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### How to reach us:

**USA/EUROPE/Locations Not Listed:** Motorola Literature Distribution; P.O. Box 5405, Denver, Colorado 80217. 1-303-675-2140 or 1-800-441-2447

**JAPAN:** Motorola Japan Ltd.; SPS, Technical Information Center, 3-20-1, Minami-Azabu. Minato-ku, Tokyo 106-8573 Japan. 81-3-3440-3569

**ASIA/PACIFIC:** Motorola Semiconductors H.K. Ltd.; Silicon Harbour Centre, 2 Dai King Street, Tai Po Industrial Estate, Tai Po, N.T., Hong Kong. 852-2668334

**Technical Information Center: 1-800-521-6274**

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