The RF Line

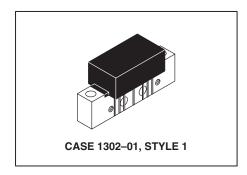
Low Distortion Wideband Reverse Amplifier Module

Designed specifically for broadband applications requiring low multi–channel distortion characteristics. Specified for use as return amplifiers for 2–way cable TV systems.

- Designed for Low Power Consumption
- Specified for 6 and 10 Channel Performance
- Guaranteed Broadband Power Gain
- · Guaranteed Broadband Noise Figure
- All Gold Metallization
- Designed to Ensure Good Gain Stability versus Temperature

MHW1223LA

5-200 MHz, 22.7 dB CATV LOW CURRENT AMPLIFIER



MAXIMUM RATINGS

Parameter		Value	Unit
DC Supply Voltage	V _{CC}	+28	Vdc
RF Input Voltage (Single Tone)	V _{in}	+60	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 Ω system, unless otherwise noted)

Characteristic		Symbol	Min	Тур	Max	Unit
Bandwidth	All	BW	5	_	200	MHz
Power Gain	(f = 5 MHz)	Gp	22.1	22.7	23.5	dB
Slope	(5–200 MHz)	S	- 0.2	_	0.7	dB
Gain Flatness (Peak To Valley)	(5–200 MHz)	_	_	_	0.4	dB
Return Loss — Input/Output		IRL/ORL				dB
	(@ f = 5-150 MHz)		20	_	_	
	(@ f = 150-200 MHz)		18	_	_	
Composite Second Order						dB
(V _{out} = +50 dBmV per Ch., Worst 0	Case)					
	6-Channel FLAT	CSO ₆	<u> </u>	- 73	- 68	
	10-Channel FLAT	CSO ₁₀	_	- 72	- 65	



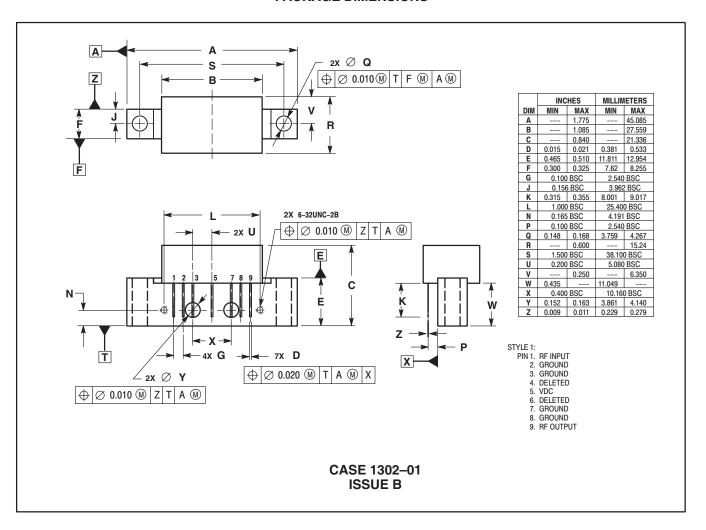
ELECTRICAL CHARACTERISTICS – continued (V_{CC} = 24 Vdc, T_C = 30° C, 75 Ω system, unless otherwise noted)

Characteristic Cross Modulation Distortion (Vout = +50 dBmV per Ch., Worst Case)		Symbol	Min	Тур	Max	Unit dB
	10-Channel FLAT	XMD ₁₀	_	-63	-60	
Composite Triple Beat (V _{Out} = +50 dBmV per Ch., Worst Case)						dB
(out	6-Channel FLAT	CTB ₆	_	-78	-75	
	10-Channel FLAT	CTB ₁₀	_	-69	-66	
Noise Figure		NF				dB
	(f = 5-200 MHz)		_	6.3	7	
DC Current		I _{DC}	85	95	110	mA

NOTES

MOTOROLA RF DEVICE DATA MHW1223LA

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. 852–26668334

Technical Information Center: 1-800-521-6274

HOME PAGE: http://www.motorola.com/semiconductors/



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