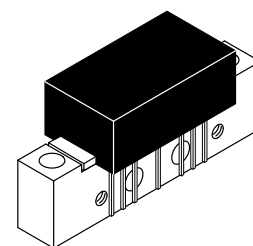


# The RF Line 128-Channel (860 MHz) CATV Line Extender Amplifier

- Specified for 128-Channel Performance
- Broadband Power Gain — @ f = 50 MHz  
G<sub>p</sub> = 27.2 dB (Typ)
- Broadband Noise Figure  
NF = 6 dB (Typ) @ 860 MHz
- All Gold Metallization
- Improved CTB Performance over Previous Version

**MHW8272A**

**27 dB GAIN  
860 MHz  
128-CHANNEL  
CATV AMPLIFIER**



**CASE 714Y-03, STYLE 1**

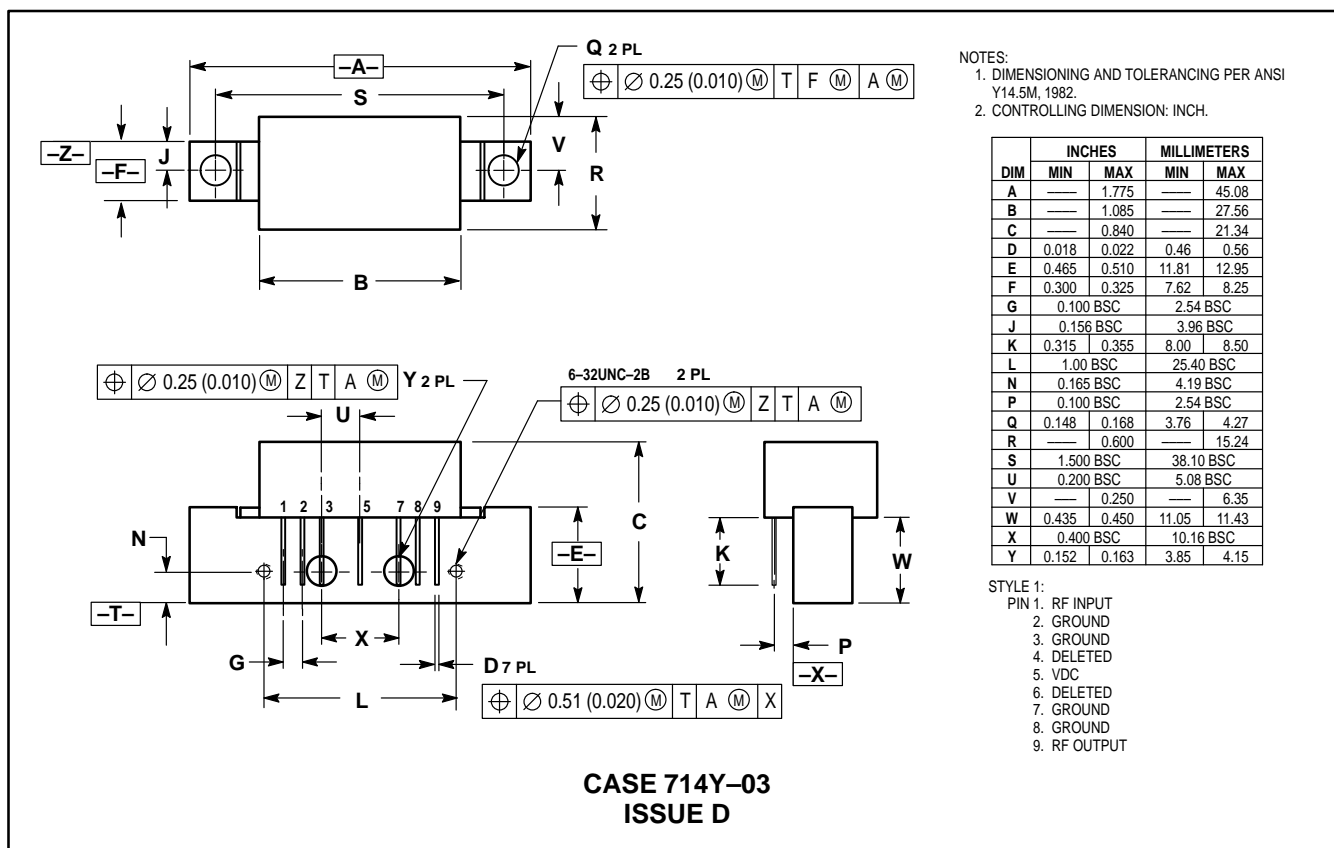
## MAXIMUM RATINGS

Rating	Symbol	Value	Unit
RF Voltage Input (Single Tone)	V <sub>in</sub>	+55	dBmV
DC Supply Voltage	V <sub>CC</sub>	+28	Vdc
Operating Case Temperature Range	T <sub>C</sub>	-20 to +100	°C
Storage Temperature Range	T <sub>stg</sub>	-40 to +100	°C

## ELECTRICAL CHARACTERISTICS (V<sub>CC</sub> = 24 Vdc, T<sub>C</sub> = +30°C, 75 Ω system unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	40	—	860	MHz
Power Gain 50 MHz 860 MHz	G <sub>p</sub>	26.2 27	27.2 27.7	27.8 29.5	dB
Slope 40–860 MHz	S	0	0.6	2	dB
Gain Flatness (40–860 MHz, Peak to Valley)	—	—	0.4	0.8	dB
Return Loss — Input/Output (Z <sub>0</sub> = 75 Ohms) @ 40 MHz @ f > 40 MHz (Derate)	IRL/ORL	20 —	— —	— 0.007	dB dB/MHz
Composite Second Order (V <sub>out</sub> = +38 dBmV/ch., Worst Case) 128-Channel FLAT	CSO <sub>128</sub>	—	-69	-64	dBc
Cross Modulation Distortion @ Ch 2 (V <sub>out</sub> = +38 dBmV/ch., FM = 55 MHz) 128-Channel FLAT	XMD <sub>128</sub>	—	-65	-62	dBc
Composite Triple Beat (V <sub>out</sub> = +38 dBmV/ch., Worst Case) 128-Channel FLAT	CTB <sub>128</sub>	—	-69	-64	dBc
Noise Figure 50 MHz 860 MHz	NF	— —	— 6.0	5.5 7.0	dB
DC Current (V <sub>DC</sub> = 24 V, T <sub>C</sub> = 30°C)	I <sub>DC</sub>	280	310	350	mA

## PACKAGE DIMENSIONS



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**JAPAN:** Nippon Motorola Ltd.: SPD, Strategic Planning Office, 141,  
4-32-1 Nishi-Gotanda, Shagawa-ku, Tokyo, Japan. 03-5487-8488

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**ASIA/PACIFIC:** Motorola Semiconductors H.K. Ltd.; 8B Tai Ping Industrial Park,  
51 Ting Kok Road, Tai Po, N.T., Hong Kong. 852-26629298

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