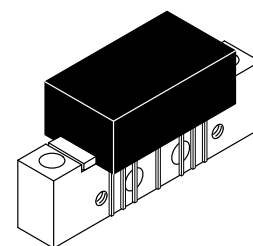


The RF Line 128-Channel (860 MHz) CATV Line Extender Amplifier

- Specified for 128-Channel Performance
- Broadband Power Gain — @ f = 50 MHz
G_p = 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 _{in}	+55	dBmV
DC Supply Voltage	V _{CC}	+28	Vdc
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	Typ	Max	Unit
Frequency Range	BW	40	—	860	MHz
Power Gain 50 MHz 860 MHz	G _p	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 ₀ = 75 Ohms) @ 40 MHz @ f > 40 MHz (Derate)	IRL/ORL	20 —	— —	— 0.007	dB dB/MHz
Composite Second Order (V _{out} = +38 dBmV/ch., Worst Case) 128-Channel FLAT	CSO ₁₂₈	—	-69	-64	dBc
Cross Modulation Distortion @ Ch 2 (V _{out} = +38 dBmV/ch., FM = 55 MHz) 128-Channel FLAT	XMD ₁₂₈	—	-65	-62	dBc
Composite Triple Beat (V _{out} = +38 dBmV/ch., Worst Case) 128-Channel FLAT	CTB ₁₂₈	—	-69	-64	dBc
Noise Figure 50 MHz 860 MHz	NF	— —	— 6.0	5.5 7.0	dB
DC Current (V _{DC} = 24 V, T _C = 30°C)	I _{DC}	280	310	350	mA

