

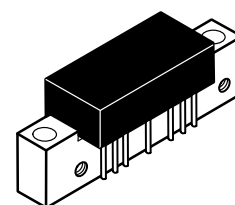
The RF Line

128-Channel (860 MHz) CATV Line Extender Amplifier

- Specified for 128-Channel Performance
- Broadband Power Gain — @ f = 40–860 MHz
G_p = 29 dB (Typ)
- Broadband Noise Figure
NF = 6 dB (Typ) @ 860 MHz
- Superior Gain, Return Loss and DC Current Stability with Temperature
- All Gold Metallization
- 7 GHz f_T Ion-Implanted Transistors

MHW8292

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



CASE 714-06, STYLE 1

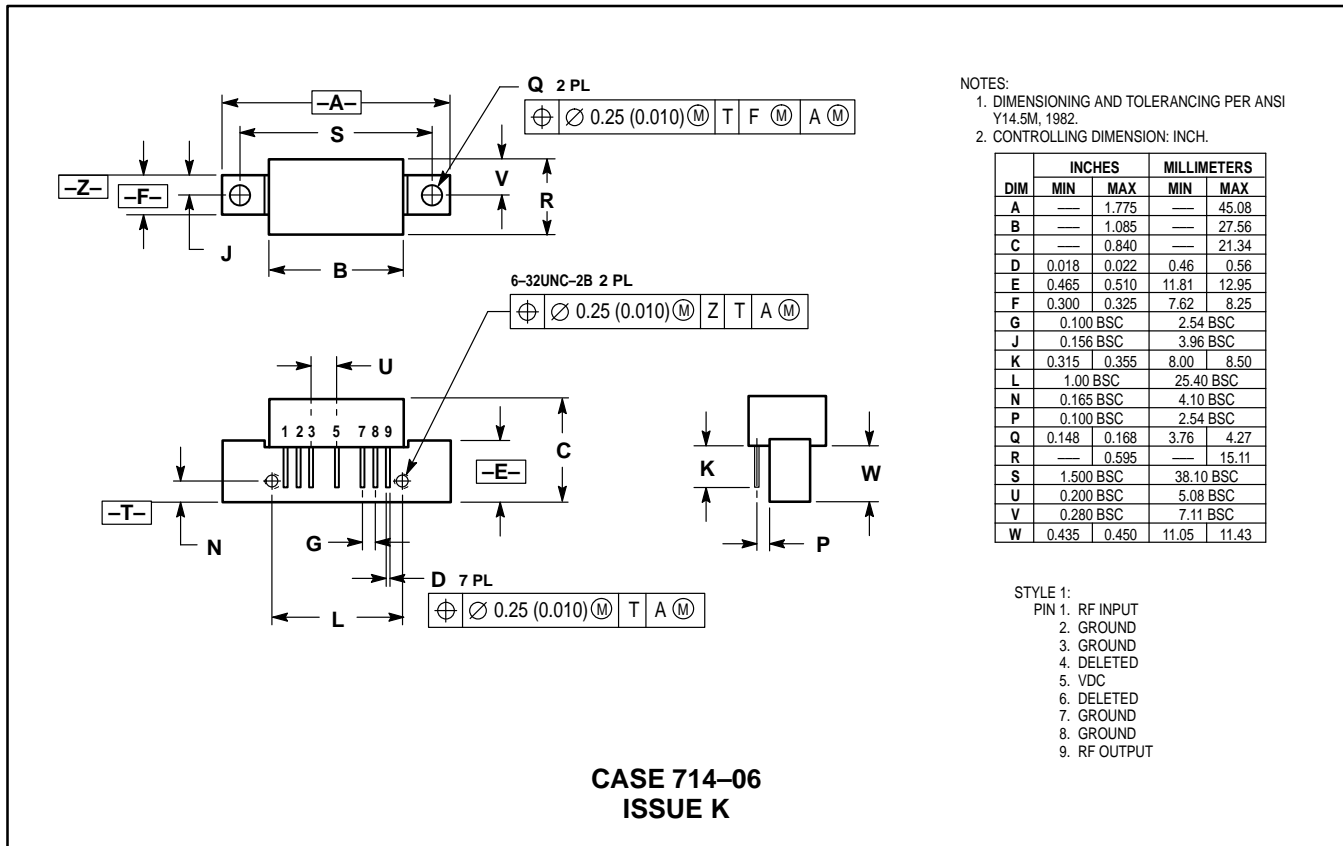
MAXIMUM RATINGS

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	G _p	28.2 29	29 —	29.8 31.5	dB
Slope	S	0	1.0	2.5	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	—	—	-56	dBc
Cross Modulation Distortion @ Ch 2 (V _{out} = +38 dBmV/ch., FM = 55 MHz) 128-Channel FLAT	XMD ₁₂₈	—	—	-60	dBc
Composite Triple Beat (V _{out} = +38 dBmV/ch., Worst Case) 128-Channel FLAT	CTB ₁₂₈	—	—	-60	dBc
Noise Figure	NF	— —	— 6.0	5.5 7.0	dB
DC Current (V _{DC} = 24 V, T _C = 30°C)	I _{DC}	280	310	350	mA

PACKAGE DIMENSIONS



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