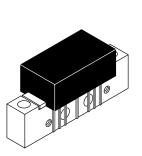
- 24 V Supply Voltage
- Specified for 110–Channel Performance
- Typical Noise Figure
   NF = 5.5 dB @ 750 MHz
- All Gold Metallization
- Improved CTB Performance over Previous Versions

# **MHW7272A**

27 dB GAIN 750 MHz 110–CHANNEL CATV AMPLIFIER



## CASE 714Y-03, STYLE 1

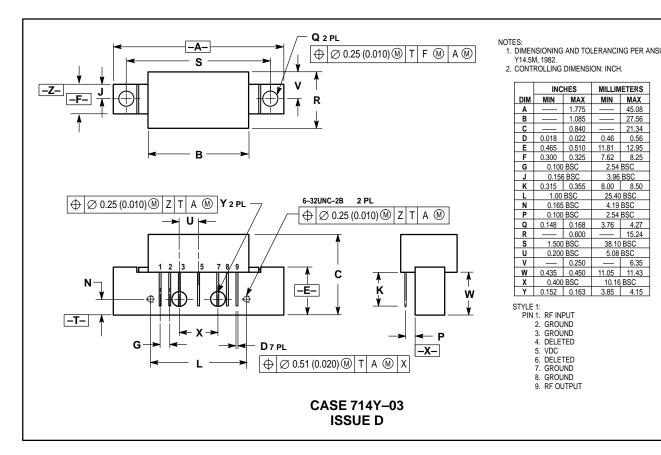
#### MAXIMUM RATINGS

Rating	Symbol	Value	Unit
RF Voltage Input (Single Tone)	V <sub>in</sub>	+55	dBmV
DC Supply Voltage	VCC	+28	Vdc
Operating Case Temperature Range	т <sub>С</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  $\Omega$  system unless otherwise noted)

Characteristic		Symbol	Min	Тур	Max	Unit
Frequency Range		BW	40	—	750	MHz
Power Gain	50 MHz 750 MHz	Gp	26.2 27	27.2 27.7	27.8 29	dB
Slope	40–750 MHz	S	0	0.7	1.5	dB
Gain Flatness (40-750 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> = +40 dBmV/ch., Worst Case)	110-Channel FLAT	CSO <sub>110</sub>	—	-70	-64	dBc
Cross Modulation Distortion @ Ch 2 (V <sub>out</sub> = +40 dBmV/ch., FM = 55 MHz)	110-Channel FLAT	XMD <sub>110</sub>	—	-63	-60	dBc
Composite Triple Beat (V <sub>OUt</sub> = +40 dBmV/ch., Worst Case)	110-Channel FLAT	CTB <sub>110</sub>	—	-68	-64	dBc
Noise Figure	50 MHz 750 MHz	NF		 5.5	5.5 6.5	dB
DC Current ( $V_{DC}$ = 24 V, $T_{C}$ = 30°C)		IDC	280	310	350	mA

### PACKAGE DIMENSIONS



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