

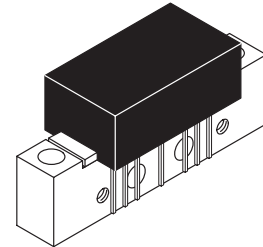
The RF Line Low Distortion Wideband Reverse Amplifier Module

Designed specifically for broadband applications requiring low distortion characteristics. Specified for use as return amplifiers for low-split, 2-way cable TV systems. Features all gold metallization system.

- Guaranteed Broadband Power Gain
- Guaranteed Broadband Noise Figure
- Superior Gain, Return Loss and DC Current Stability with Temperature
- All Gold Metallization
- Circuit Design Optimized for Good RF Stability Under High VSWR Load Conditions
- Transformers Designed to Insure Good Low Frequency Gain Stability versus Temperature

MHW1254L

**50 MHz, 24 Vdc, 25 dB
CATV LOW CURRENT AMPLIFIER**



CASE 714Y-03, STYLE 1

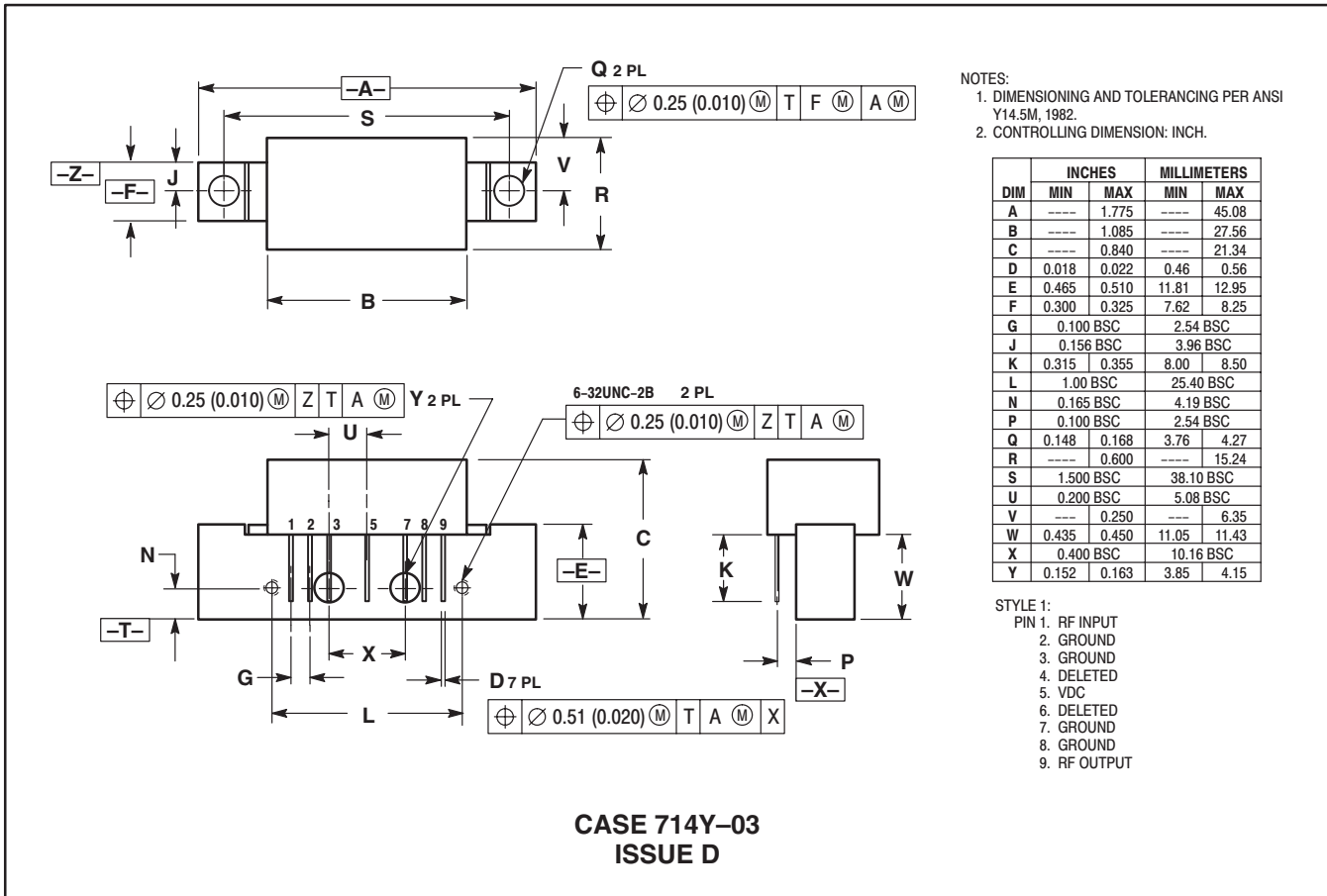
MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
DC Supply Voltage	V_{CC}	+28	Vdc
RF Input Voltage (Single Tone)	V_{IN}	+70	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, $T_C = 30^\circ\text{C}$, 75 ohm system, unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Bandwidth	BW	5.0	50	MHz
Power Gain (f = 5.0 MHz)	G_p	24.3	25.8	dB
Return Loss (@ f = 5.0-50 MHz)	RL	20	—	dB
Second Order Distortion ($V_{out} = +50$ dBmV/ch)	IMD	—	-70	dBc
Cross Modulation ($V_{out} = +50$ dBmV/ch)	XMD_4	—	-62	dBc
Triple Beat Distortion ($V_{out} = +50$ dBmV/ch)	TB_3	—	-70	dBc
Noise Figure (f = 50 MHz)	NF	—	4.5	dB
DC Current	IDC	100	135	mA

PACKAGE DIMENSIONS



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