МОТО ПО 10 (342 供应商 SEMICONDUCTOR TECHNICAL DATA

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by MHW6342/D

The RF Line 77-Channel (550 MHz) **CATV** Amplifier

... designed specifically for 550 MHz CATV applications. Features ion-implanted arsenic emitter transistors with 7 GHz fr and an all gold metallization system.

- Specified for 77–Channel Performance
- Broadband Power Gain @ f = 40-550 MHz V.DZSC.COM
 - G_D = 34.5 dB (Typ) @ 50 MHz 35 dB (Min) @ 550 MHz
- Broadband Noise Figure @ 550 MHz NF = 5.5 dB (Typ)
- Superior Gain, Return Loss and DC Current Stability with Temperature
- All Gold Metallization

REVSC.COM

• 7 GHz Ion–Implanted Transistors



34 dB GAIN 550 MHz 77-CHANNEL CATV AMPLIFIER



ABSOLUTE MAXIMUM RATINGS

Rating	Symbol	Value	Unit			
RF Voltage Input (Single Tone)	V _{in}	+55	dBmV			
DC Supply Voltage	VCC	+28	Vdc			
Operating Case Temperature Range	тс	-20 to +100	°C			
Storage Temperature Range	Tstg	-40 to +100	°C			

ELECTRICAL CHARACTERISTICS (V_{CC} = 24 Vdc, T_C = +30°C, 75 Ω system unless otherwise noted)

Characteristic		Symbol	Min	Тур	Мах	Unit
Frequency Range	1	BW	40	_	550	MHz
Power Gain 50	MHz	Gp	33.5	34.5	35.5	dB
Power Gain 550	MHz	Gp	34.5	—	—	dB
Slope		S	0	1	2	dB
Gain Flatness (Peak To Valley)		—	—	0.4	0.8	dB
Return Loss — Input/Output 40-550 (Z ₀ = 75 Ohms) 450-550	MHz I MHz	RL/ORL	18 16	西子	150.0	dB
Second Order Intermodulation Distortion (V _{out} = +46 dBmV per ch., Ch 2, M13, M22) (V _{out} = +44 dBmV per ch., Ch 2, M30, M39)	6.19	IMD	H.	-75 -70	 -64	dB
Cross Modulation Distortion (V _{out} = +46 dBmV per ch.) (V _{out} = +44 dBmV per ch.) 60–Channel 77–Channel	FLAT FLAT	XMD ₆₀ XMD ₇₇	_	-61 -59	 _57	dB
Composite Triple Beat60–Channel(Vout = +46 dBmV per ch.)60–Channel(Vout = +44 dBmV per ch.)77–Channel	FLAT FLAT	СТВ ₆₀ СТВ ₇₇		-60 -58	 -57	dB
Noise Figure 550	MHz	NF	—	5.5	6.5	dB
DC Current		IDC	_	310	340	mA



PACKAGE DIMENSIONS



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