



DESCRIPTION

The P10-VHF-L-20 is an integrated linear amplifier designed for the television integrator. Providing a minimum of 5W Pk Sync linear power, this is the perfect driver for use in any low band VHF transmitter or LPTV application.

- No RF assembly or circuit tuning
- 10 watts of linear output power
- 20dB typical gain at channel 6
- Combined video and aural at full rated power
- Modular construction for ease of integration
- Proper heatsinking is required

TECHNICAL SUMMARY

Frequency Range:	54 to 88 MHz
P1dB:	10 Watts CW
Class:	A
Supply Voltage:	28 V
Gain:	20 dB
Efficiency:	10 %
Temperature Range:	0 to +70 °C
Max VSWR:	5 : 1

ELECTRICAL SPECIFICATIONS

Parameter	Min	Typ	Max	Units	Notes
Frequency	54		88	MHz	
P1dB	10			W, CW	
Linear Power Out	5	10		W	
IMD3	-40	-45		dBc	For 2 tones, 1MHz spacing, 5W PEP
Power Input		100		mW, CW	
Gain	18	20		dB	
Vsupply		28		V, DC	
Drain Current		1	2	A, DC	
Input VSWR		1.2:1	1.5:1		
Insertion Phase Variation		±5		°	Unit to unit
Gain Variation		±1		dB	Unit to unit
F2 Second Harmonic		-30		dBc	
F3 Third Harmonic		-12		dBc	
Operating Temperature	0		+70	°C	
Physical Dimensions					2.2" x 3.4" x 1.5"

All specifications valid for 50 Ω output load, $V_{sup} = +28VDC$, $I_{dq} = 1.0A$

ABSOLUTE MAXIMUM RATINGS

Parameter	Value	Units	Notes
Maximum Operating Voltage	34	V, DC	
Stable Operating Voltage	26 to 32	V, DC	
Maximum Bias Current, Q100	2.0	A, DC	Factory set to 1.0A
Maximum Drain Current	2	A, DC	
Load Mismatch Survival	5:1		
Storage Temperature	-40 to +105	°C	
Max Operating Baseplate Temperature	+70	°C	

FEATURES

- Amplifier disable
- Current sense
- Connectorized power