



DESCRIPTION

The P200-VHF-H-16 is an integrated linear amplifier designed for the television integrator. In steady production for more than 10 years, this gold-metallized MOSFET amplifier provides a minimum of 175W Pk Sync linear power. This is the perfect IPA or output amplifier for any high band VHF television transmitter.

- No RF assembly or circuit tuning
- 200 watts of output power
- 16dB typical gain at channel 13
- Combined video and aural at full rated power
- Modular construction for ease of integration

TECHNICAL SUMMARY

Frequency Range:	170 to 230 MHz
P1dB:	200 Watts CW
Class:	AB
Supply Voltage:	32 V
Gain:	16 dB
Efficiency:	45 %
Temperature Range:	0 to +70 °C
Max VSWR:	5 : 1

ELECTRICAL SPECIFICATIONS

Parameter	Min	Typ	Max	Units	Notes
Frequency	170		230	MHz	
P1dB		200		W, CW	
Linear Power Out	175	200		W, Pk	
IMD3	-40			dBc	For 2 tones, 1MHz spacing, 175W PEP
Power Input		5	8	W, Pk	
Gain	15	16		dB	
Vsupply	28	32	34	V, DC	
Drain Current		10	11	A, DC	200W Pk Sync
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		-35		dBc	
F3 Third Harmonic		-15		dBc	
Operating Temperature	0		+70	°C	
Physical Dimensions					2.0" x 4.0" x 1.5"

All specifications valid for 50 Ω output load, $V_{sup} = +32VDC$, $I_{dq} = 0.8A$

ABSOLUTE MAXIMUM RATINGS

Parameter	Value	Units	Notes
Maximum Operating Voltage	34	V, DC	
Stable Operating Voltage	28 - 34	V, DC	
Maximum Bias Current, Q100	3.0	A, DC	Factory set to 0.8A
Maximum Drain Current	14	A, DC	
Load Mismatch Survival	5:1		All phase angles, Id limit 12A, 2 seconds max
Storage Temperature	-40 to +105	°C	
Max Operating Baseplate Temperature	+70	°C	

FEATURES

- Temperature compensated bias
- Amplifier disable
- Current sense
- Connectorized power and I/O