

CAP300HF

1.6-54 MHz - 300 Watt
Solid State Pallet

The CAP300HF is a 300W HF/VHF broadband pallet amplifier, offering outstanding performance and reliability. The heart of this pallet is the NXP BLF278 50V RF power MOSFET providing high gain and RF power output in a small 3" x 4.5" x 1.25" footprint. The advanced Thermal Tracking bias circuitry allows for operation in Class A or AB with stable gain over tempature.



Features

- 300 Watts Class AB
- Thermal tracking Bias
- Broadband RF no tuning
- Copper Heat Spreader

Specifications:

Vsup=+50Vdc, Idq=1.0A, Tbase=25°C

Maximum Ratings

Parameter	Value
Input Voltage	+55VDC
Bias Current	3.0 Amp
Drain Current	15.0 Amp
Load Mismatch all Phase angles	5:1
Baseplate Temp	+70°C
Storage Temp	-40°C - +105°C

Parameter	Min.	Typ	Max.	Unit
Frequency	1.6		54	MHz
Pout CW (P1dB)	300	325		Watts
Power In			4.8	Watts
Gain		18		dB
Drain Current		10	12	Amps
Efficiency	50	60		%
Input VSWR		1.5:1	1.8:1	
Op Voltage	48	50		Volt
2nd Harmonic		-35		dBc
3rd Harmonic		-15		dBc
IMD ₃ , 2 Tone		-30	-28	dBc

Communication Amplifiers, LLC