

Broadcast Technology Company B700-FM-88-108 RF Amplifier Module Specifications

This amplifier module is ideal for driver and final output stages in analog and digital FM broadcast equipment.

- **86 – 110MHz**
- **48 Volts**
- **Input/output 50 ohms**
- **Pout: 700W minimum**
- **19dB Gain (700W)**
- **Class B**
- **SD2942 Devices**



Absolute Maximum Ratings (T case = 25C)			
Symbol	Parameter	Value	Unit
Vs	Drain voltage supply	50	V DC
Is	Supply Current	24	A dc
VSWR	Load Mismatch (All phase angles, Id=22A, TC=+55C)	3 to 1	
Tstg	Storage temperature range	-40 to +85C	Celsius
Tc	Base plate operating temperature	-40 to +55C	Celsius
RF IN	RF Input	12.0	Watts
RF OUT	RF Output	725	Watts

Electrical Specifications (T case = 25C, 50 ohm loaded, VS=48V bias=90ma x 2)				
Characteristics	min	typ	max	unit
Operating Frequency range	86		110	MHz
Fundamental output power	700			W
Power Input	n/a	8.0	12.0	W
Power Gain (700w output)	18.0	19.0	n/a	dB
Collector Efficiency	68	70	n/a	%
Collector Current (700w output)		21.5	23.0	A dc
Insertion Phase variation (unit to unit)		+/-3.5		degrees
Power gain (unit to unit)		+/-1.0		dB
F2 Second Harmonic		-40dB		dB
F3 Third Harmonic		-20dB		dB
Transistor Bias Current: Factory set to 90ma @48V. Adjustment is not recommended	85	90	100	ma dc