



## DESCRIPTION

The P350-FM-18 is an integrated amplifier building block which requires only power, input and output connections. This highly cost-effective amplifier has been designed for FM radio transmitter integrators and offers a great deal of flexibility.

- No RF assembly or circuit tuning
- 350 watts output power
- 18dB typical gain at 108MHz
- Amplifier disable

## TECHNICAL SUMMARY

Frequency Range:	88 to 108 MHz
P1dB:	350 Watts CW
Class:	C
Supply Voltage:	50 V
Gain:	18 dB
Efficiency:	68 %
Temperature Range:	0 to +60 °C
Max VSWR:	3 : 1

### ELECTRICAL SPECIFICATIONS

Parameter	Min	Typ	Max	Units	Notes
Frequency	88		108	MHz	
P1dB		350		W, CW	
Psat		400		W, CW	
Power Input		5.5		W, CW	
Gain	17	18		dB	
Vsupply	44		52	V, DC	
Drain Current		10	11	A, DC	
Input VSWR		1.5:1	1.7:1		
Insertion Phase Variation		±5		°	Unit to unit
Gain Variation		±1		dB	Unit to unit
F2 Second Harmonic		-25		dBc	
F3 Third Harmonic		-15		dBc	
Operating Temperature	0		+60	°C	
Physical Dimensions					2.0" x 4.0" x 1.5"

All specifications valid for 50 Ω output load,  $V_{sup} = +50VDC$ ,  $I_{dq} = 0.1 A$

### ABSOLUTE MAXIMUM RATINGS

Parameter	Value	Units	Notes
Maximum Operating Voltage	55	V, DC	
Stable Operating Voltage	44 to 52	V, DC	
Maximum Bias Current	1.0	A, DC	
Maximum Drain Current	13	A, DC	
Load Mismatch Survival	5:1		
Storage Temperature	-40 to +105	°C	
Max Operating Baseplate Temperature	+65	°C	

### FEATURES

- Temperature compensated bias
- Temperature controller - analog temperature output
- High temperature alarm with selectable automatic PA disable
- High temperature alarm output
- Amplifier disable
- Current sense, each transistor
- Connectorized power and I/O
- Flexible RF locations