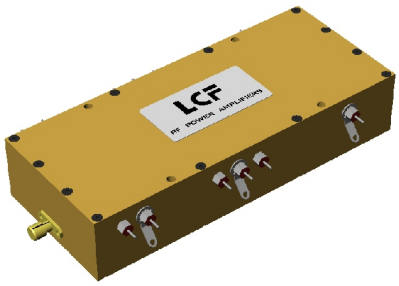
LCF ENTERPRISES

RF POWER AMPLIFIERS

Model A041
P/N 1200-10-10-25-A3

RF POWER AMPLIFIER MODULE



10 - 1200 MHz
10 Watts
Gain: 25 dB Voltage: 24 VDC

Small Size
High Efficiency
Low Even Order Harmonics
Rugged

PERFORMANCE

PARAMETER	SPECIFICATIONS	COMMENTS
RF Output Power	10 Watts cw minimum	Class AB linear
Frequency Range	10 - 1200 MHz	
Gain	25 dB typical	
Main DC Supply	24 VDC, 4 Amp maximum	2 to 3 Amp typical at 10 W output (see Note 1)
Bias Supply	15 VDC, 10 mA maximum	Provides enable/disable control (see Note 2)
Efficiency	15 - 20 % typical	
Harmonics / Spurious	See Plot / Spurious <-60 dBc	
In / Out Impedance		Designed for small size, high efficiency; compatible with 50 ohms
RF In / Out Connectors	SMA Female	
DC Connectors	Solderable filtered feed throughs with ground lugs	
Size / Weight	4.84" x 2.0" x 1.0" / < 1 lb.	
Operating Temperature	-50 ◦ C to +60◦ C	Consult technical support for higher temperature operation.
Humidity	95 - 100 %	
Vibration	110 G Shock	
Altitude	50,000 feet	

OPEN ARCHITECTURE FEATURES

1. Separate bias inputs and power supply feed throughs permit either Class A or Class AB biasing. Bias off disables amplifier
2. Separate power supply terminals for each push/pull section permit individual fuse protection.
3. A low loss output matching network provides high efficiency and optimum stability.

OPTIONS AVAILABLE

- Higher powers through multiple module combining
- Inside wiring with only one DC connection
- Detailed Application Notes
- Transmit/Receive Subsystems
- TTL compatible enable/disable control
- Narrower band optimization. (no additional cost)
- Complete rackmount 120/220 VAC systems
- Test fixture with heat sink, fuse protection, and thermal shutdown

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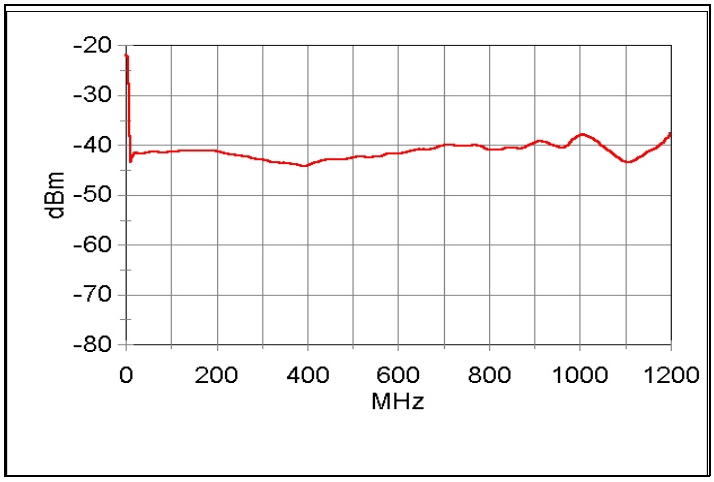
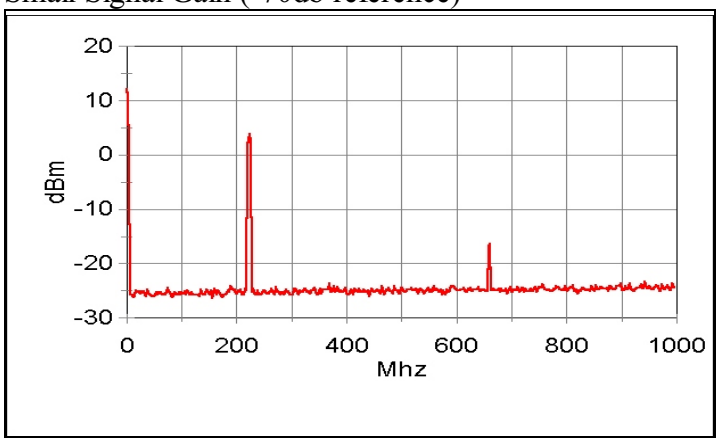
ELECTRICAL PERFORMANCE



Small Signal Gain (-70db reference)

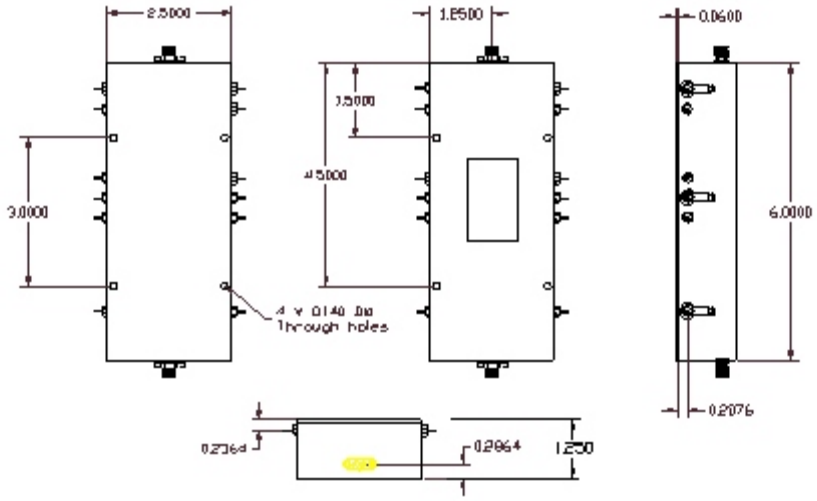


Harmonic Response

HIGH POWER DATA (Typical)

Freq (MHz)	Input Power (dBm)	Output Power (W)	Drain Voltage (V)	DC Current (A)	DC Power (W)	Eff (%)	Gain (dB)
10.00	18.00	10.10	27.60	2.56	70.66	14.29	22.04
100.00	17.40	10.04	27.60	2.92	80.59	12.46	22.62
300.00	15.00	14.70	27.60	2.92	80.59	18.24	26.67
500.00	12.00	15.15	27.70	2.55	70.64	21.45	29.80
900.00	15.00	15.20	27.60	2.60	71.76	21.18	26.82
1200.00	15.20	11.40	27.70	2.15	59.56	19.14	25.37

MECHANICAL OUTLINE



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