

Pulse RF Amplifier

- **Frequency Response: 380-420 MHz**
- **Power: 10 watts PEP**
- **CW Power: 3 watts**
- **Gain: 38 dB**



Description:

Designed for driving an acousto-optic (Bragg) cell. This amplifier utilizes RF Power MOSFET devices that provide high gain, wide dynamic range and great pulse reproduction with minimal pulse ringing.

ELECTRICAL SPECIFICATION @ VDD= +24VDC: Temp.=25°C, 50Ω System

Parameter	Symbol	Min	Typ	Max	Unit
Operating Frequency	BW	380		420	MHz
Power Output CW	P _{CW}		3		Watt
Power Output PEP (10 ns pulse 25% duty cycle)	P _{PEP}		10		Watt
Gain	G	35	38		dB
Small Signal Gain Flatness	ΔG			±1.0	dB
Input VSWR	S11		1.6:1	2.0:1	-
Harmonics	H		-19	-18	dBc
Inter-modulation Point 2 Tones, 0.5W per tone @ 380 & 381 MHz	IP ₃		50		dBm
Spurious Signals	dBc		-70	-60	dBc
Operating Voltage	V _{dc}	23	24	28	Volt
Operating Current	Amps		1.5	2.0	Amp
Enable / Disable (shut down pin: gnd=off, open=on)	ms	Not Included			ms

MECHANICAL SPECIFICATION

Parameter	Description	Limits	Units
Dimensions	2.2 x 4 x 0.86	Max	Inch
RF Connectors IN/OUT	SMA	-	-
DC Connectors	Filtered feed-through	-	-
Cooling	Heat-sink not included	-	-
Weight		Max	lb

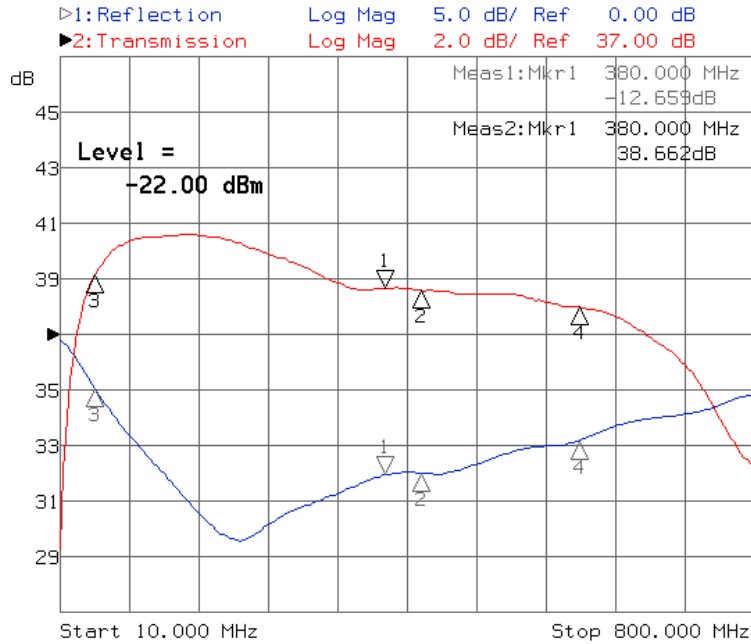
PROTECTIONS

Thermal Shutdown	None	Typ
Input Overdrive	+5 dBm PEP Max	Max
Load VSWR	Infinite up to 10 watts PEP	Max
Reverse Polarity Protection	None	-

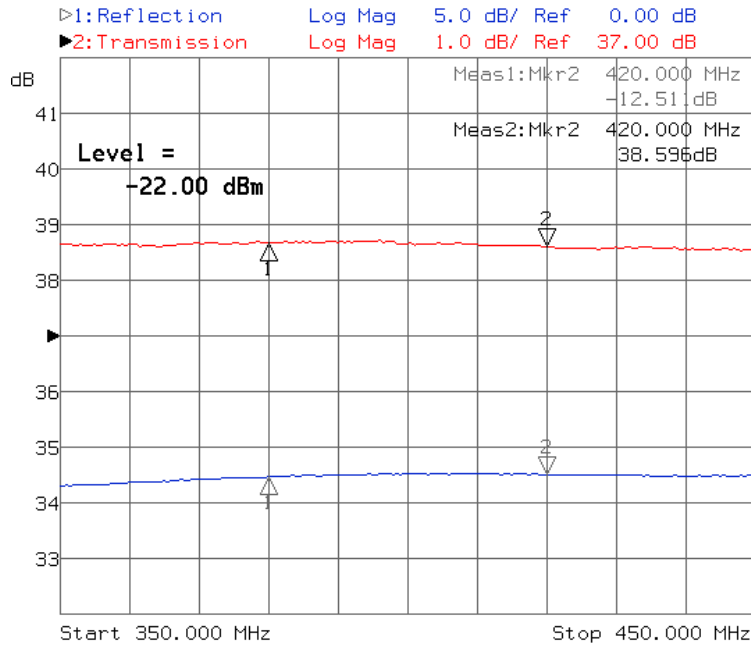
ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Units
Operating Case Temperature	T _c	0°C		+50°C	°C
Storage Temperature	T _{stg}	-30°C		+100°C	°C
Relative humidity non-condensation	RH	95			%

Response Curve



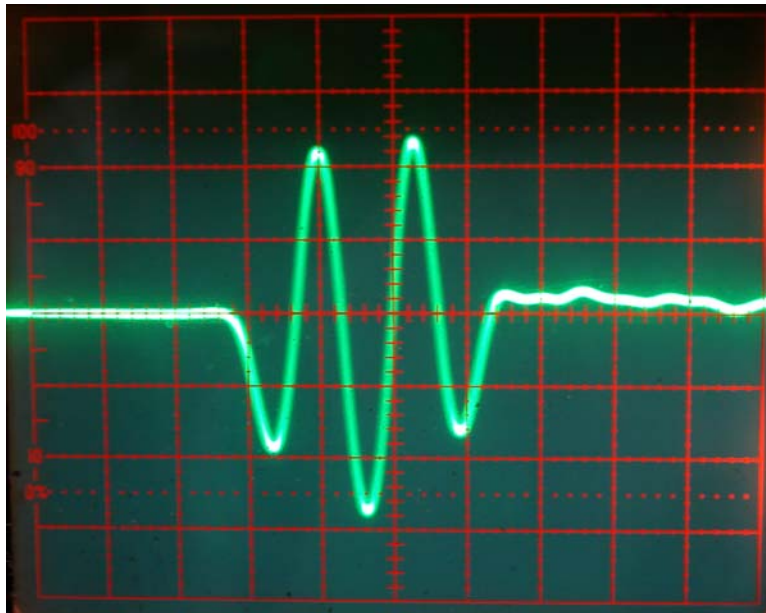
Broadband Small Signal Frequency Response Curve



Small Signal Frequency Response Curve



Response Curve



Source: Coherent Cavity Dumper 7200



NP-512 @ 10 watts PEP

Outline Drawing

