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MODEL 4039R-002

292 - 320 MHz 250 WATTS LINEAR POWER RF AMPLIFIER

Solid State High Power RF Amplifier

The 4039R-002 is a 250 Watt RF amplifier that covers the 292 – 320 MHz frequency range. This small and light-weight amplifier utilizes Class A/AB linear power devices that provide an excellent 3rd order intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability.

	<u>Parameter</u>	Specification @ 25° C	
<u>Electrical</u>			
1	Frequency Range	292 – 320 MHz	
2	Saturated Output Power	250 Watts typical	
3	Power Output @ 1dB Comp.	200 Watts min	
4	Gain (Keyed)	+53 dB min	
5	Gain (Un-Keyed)	0 dB max	
6	TX KEY line	Ground = Keyed	
7	Off and Unkeyed Output Level*	<-73 dBm	
8	Isolation	> 60 dB w/ 0dBm @ full gain	
9	TX Rise (Turn-on) Time**	< 100µs Typical 150µs Max	
10	TX Fall (Turn-off) Time**	< 200µs Typical, 320µs Max	
11	Noise Figure	10 dB max	
12	Input VSWR	2:1 max	
13	Harmonics	-20 dBc typical @ 200 Watts	
14	Spurious Signals	< -60 dBc typical @ 200 Watts < -55 dBc typical @ 250 Watts	
15	Input/Output Impedance	50 Ohms nominal	
16	AC Input Power	1000 Watts Max	
17	AC Input	100 – 240 VAC, single phase	
18	RF Input	0 dBm nominal	
19	Maximum RF Input	+13dBm	
20	Class of Operation	AB	
<u>Mechanical</u>			
21	Dimensions	19" x 5.25" x 20"	
22	Weight	40 lb. max	
23	Connectors	Type-N	
24	Grounding	Chassis	
25	Cooling	Internal Forced Air	
<u>Environmental</u>			
26	Operating Temperature	0° C to +50° C	
27	Operating Humidity	95% Non-condensing	
28	Operating Altitude	Up to 15,000' Above Sea Level	
29	Shock and Vibration	MIL-STD-810F	

CIRCUIT PROTECTIONS

- ♦ Thermal Overload
- ♦ Over Current
- ♦ Over Voltage

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INCLUDED FEATURES

- ♦ Transmit key indicator LED
- ♦ 20 dB Variable Gain Control (Front)

*=When unkeyed.	and no RF input	from 225 -	400MHz for an	v 1KHz bandwidtl
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Approved By:	I	Date:

^{**=} relative to keyline, to within 1 dB of final output power level