

## FSP-HPA-010-011 50W

High Power Solid State Amplifier 1 to 1.1 GHz

## Typical Applications

The FSP-HPA-010-011 50W is ideal for:

- · Commercial Radar (IFF Radar)
- Military Radar
- Electronic Warfare
- Test equipment



Table 1. Specifications

Input Power		
DC Power	+27V/5A	
Output Specifications [ @ 25° C ]		
Frequency Range	1000-1100 MHz	
Saturated Power Output	≥50W TYP	
Gain	50±2 dB	
Min Noise Figure	5 dB TYP	
In/Out VSWR	<1.4:1 TYP	
In/Out Impedance	50 Ω	
In-band flatness	≤2dB	
Third-order inter-modulation	_	
Gain stability	$\pm 0.5 dB/24 h$ (Normal temperature)	
Input /output	with 20dB Isolator	
Efficiency	≥34%	
Noise Wave	≤-60dBc	
RF In / Out	SMA-Female	
Local/Remote	TTL	
Mechanical		
Aluminum Chassis - Grounded 190x120x26 [mm]		
Environmental		
Operating Temperature	-20° to 50° C Storage	
Temperature	-40° to 50° C	
Relative Humidity	5 to 95% non-condensing	
MTBF		
200,000 hours		

## **Features**

Lightest weight

Highest Power

Smallest footprint

## General Description

The FSP-HPA-010-011 50W is a high power rack mounted microwave amplifier that covers a 0.1 GHz range in the 1.0-1.1 GHz band. The FSP-HPA-010-011 provides an output of 50 watts. A number of options are available depending on customer requirements. TTL Local/Remote switching is provided as an option.

Small and rugged, the FSP-HPA-010-011 50W is ideal for replacement of TWT amplifiers – offering up to 30 dB improvement in noise and very short group delay characteristics. A small footprint and low power consumption make it excellent for mounting at the antenna or load, and no warm-up time is required, providing instant power-up.

Monitoring Functions		
PIN1	<b>1dB</b> Attenuation (Hang in air or add 5VDC: No attenuation; Grounding: attenuation )	
PIN2	<b>2dB</b> Attenuation (Hang in air or add 5VDC: No attenuation; Grounding: attenuation )	
PIN3	<b>4dB</b> Attenuation (Hang in air or add 5VDC: No attenuation; Grounding: attenuation )	
PIN4	<b>8dB</b> Attenuation (Hang in air or add 5VDC: No attenuation; Grounding: attenuation )	
PIN5	<b>16dB</b> Attenuation (Hang in air or add 5VDC: No attenuation; Grounding: attenuation)	
PIN7	V/L, VSWR (reflected RF Power, Max voltage,4V; 0.02V/1dBm)	
PIN10	P/L (Output RF Power; Max voltage,4V; 0.02V/1dBm)	
PIN11	LE :Enable, High Level: OFF; Low Level: ON or hang in air	
PIN14	T/ L Temperature: 0.02V/1 Celsius , 0.3V for 30 Celsius	
PIN15	GND	
	PIN6, PIN8, PIN9, PIN12, PIN13 : NC	

Selling this equipment only to state enterprises or companies that have regulatory authority is possible.