



MODEL NUMBER:
SS4026-40

**MILLIMETER SOLID STATE RF AMPLIFIER,
26.5 GHZ – 40 GHZ, 40 WATTS**

FEATURES:

- Rack mounted system
- Class AB linear GaAsFET design
- Instantaneous wide bandwidth
- Suitable for all single channel modulation standards
- Local LCD & remote flexible interfaces
- Designed for EMI/RFI, lab, and general communication applications
- High reliability and ruggedness

TEST EQUIPMENT DESCRIPTION

The EMC Shops **SS4026-40** is the first solid state millimeter RF amplifier geared toward the compliance test requirements setout in MIL-STD 461 and DO-160 compliance standards. With remote and touch screen interfacing, users have the flexibility to setup tests for short term or automate permanent installs. Monitor Forward an Reverse power, as well as VSWR, GAIN, ALC, V/I and Temperature.

The **SS4026-40** features 2.9mm (K- female) or WR42 waveguide RF output connectors, optionally installed on the front or rear). A built in pump allows for an advanced air/liquid system to ensure consistent temperature while running long test cycles. The beauty of it all, is the solid state modules are replaced at fractions of the price of a traveling wave tube (TWT) amplifier ensuring minimal service costs throughout the life of the amplifier.

ELECTRICAL SPECIFICATIONS

PARAMETER	SPECIFICATION	NOTES
Operating Frequency Range	26.5 - 40.0 GHz	
Power Output CW	40 Watt Min	
Power Gain	46 dB Min	
Power Gain Flatness	4.0 dB p-p Max	Constant input power
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	34dBm/Tone, $\Delta = 1\text{MHz}$
Harmonics	-20 dBc Min	At rated Pout
Spurious	60 dBc Min	Non-harmonics
Operating Voltage	100 - 240 VAC	
Power Consumption	800 Watt Max	
Input Power Protection	+3 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1	<1 minute at rated Pout

ENVIRONMENTAL CHARACTERISTICS

PARAMETER	SPECIFICATION	NOTES
Operating Ambient Temperature	0 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensation

MECHANICAL SPECIFICATIONS

PARAMETER	SPECIFICATION	NOTES
Dimensions W x H x D	6U Rack Mounted Chassis	6U
Weight	35 kg.	
RF Connectors In/Out	2.9 mm (K / air type) Female	
AC Power / Interface Connector	IEC 60320-C14 / 9-Pin D-Sub	Or equivalent
Cooling	Built in Fan Cooling	Variable speed
EMI SERIES: Digital Monitor & Control FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Ethernet RJ-45 TCP/IP, RS422/485 Optional GPIB Interface	Remote Bluetooth application

OUTLINE DRAWING

