



General Description:

MM-MPA-87.5094-23-31 is a Waveguide Power Amplifier that operates over the frequency range of 87.5 to 94 GHz. This model provides a typical gain of 23 dB . It provides a Psat of 31 dB typical and operates on +18.5 VDC with a typical current draw of 1750 m A.

Features:

- Ultra Wide Band: 87.5-94 GHz
- Gain: 23 dB
- Psat: 31 dB
- Internally regulated
- Unconditionally stable

Applications:

- Radar Systems
- Communication Systems
- Receivers Systems

Electrical Specifications (23° C):

Parameter	Value			Units
	Min	Typ	Max	
Frequency Range	87.5		94	GHz
Gain	20	23		dB
Gain Flatness		-		dB
Psat	30	31		dBm
Output Power (P1dB)		-		dBm
Input VSWR		2		:1
Output VSWR		2.5		:1
RF Input Power	7	8	10	dBm
DC Voltage		18.5		V
DC Current		1750		mA

Absolute Maximum Ratings:

Condition	Value
DC Voltage	18.5 V
Maximum Input Power(CW)	10 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Mechanical Specifications:

Parameter	Value
Length	56 mm
Width	99 mm
Height	86 mm
RF Connector	WR10/UG-387



Mountain Microwave

Focus on the future Waveguide Power Amplifier

MM-MPA-87.5094-23-31

87.5 to 94 GHz

Outline Drawing:

mm(Inches)

Environmental Conditions:

Parameter	Standard	Description
Operational Temperature		-25°C~+50°C
Storage Temperature		-45°C~+125°C
Random Vibration	MIL-STD-883K, Method 2026, Cond. IB	50 - 2000 Hz, 7.3 Grms
Humidity	MIL-STD-202, Method 103B, Cond. B	100% RH at 35c, 95%RH at 40°C
Altitude	MIL-STD-883K, Method 1001, Cond. C	50,000 feet

Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- Heat Sink required during operation.

Please note, all information contained in this data sheet is subject to change without notice.

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