



GaAs MMIC 19.45GHz Bandpass Filter

Typical Applications

- Communication Systems
- Point to Point Radio
- Fiber Optics
- Test Equipment
- Wideband Military & Space

Features

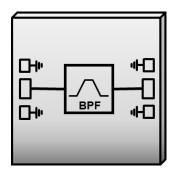
Center Frequency: 19.45GHz

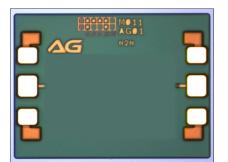
• Passband Loss: 2.6dB @ 19.45GHz

 Rejection: 30dB at 12.58GHz and 27.77GHz

• 50Ω Matched DC blocked RF Ports

• Chip Size: 1.00 x 0.750 x 0.1 mm²





Parameter	Units	Minimum	Typical	Maximum
Frequency	GHz	17.52		21.45
Passband Loss	dB		2.6	3.88
Passband Return Loss	dB			8
Rejection 30dB Point	GHz	12.58		27.77
Package Type			Die	

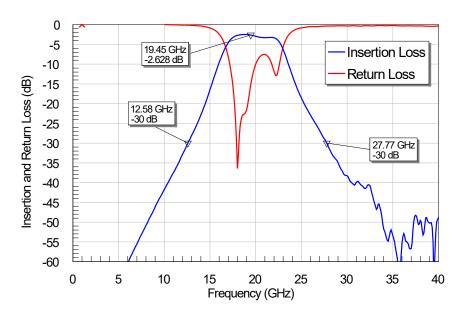




GaAs pHEMT MMIC 19.45GHz Bandpass Filter

Performance Graphs

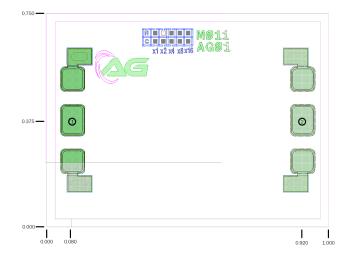
Gain and Return Loss





GaAs pHEMT MMIC 19.45GHz Bandpass Filter

Outline Drawing (dimensions in mm)



Pad Descriptions

Pad	Function	Pad Size	Description
1	RFIN	75x100μm	DC blocked 50Ω Matched
2	RFOUT	75x100μm	DC blocked 50Ω Matched
Die Bottom	GND	Backside	Epoxy/Solder to Baseplate

Absolute Maximum Ratings

Drain Bias Voltage (VDD)	No Bias
RF Input Power (RFIN)	+20dBm*
Channel Temperature	150°C
Storage Temperature	-65 to 150°C
Operating Temperature	-55 to 85°C

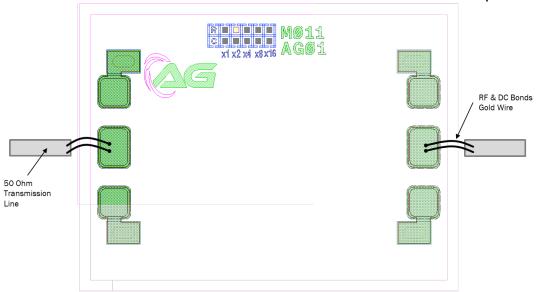
Assembly Diagrams

v011.02



Bandpass Filters - Die

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Assembly Notes:

- 1. Die Thickness is 100μm
- 2. Backside and Bondpad metallization: 4µm gold
- 3. Silver Epoxy or AuSn Eutectic attach MMIC



Die Packaging Information

GP-8 (Gel-Pak)