SUSPENDED SUBSTRATE STRIPLINE COAXIAL

High Pass Filter

ZHSS-V29G+

50Ω 29 to 50 GHz 2.4mm Female

KEY FEATURES

- Insertion Loss, 1 dB Typ.
- High Rejection, 80 dB Typ.
- Wide Passband up to 50 GHz

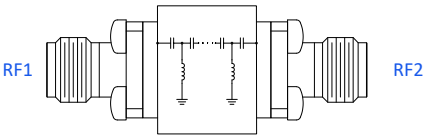


Generic photo used for illustration purposes only

APPLICATIONS

- 5G Applications
- Cellular Backhaul
- Elint

FUNCTIONAL DIAGRAM



PRODUCT OVERVIEW

Mini-Circuits' Suspended Substrate Stripline filters offer low insertion loss combined with wide stopband, good power handling & temperature stability, small form factor with rugged build ideal for harsh operating environments making them an excellent choice for wideband instruments and systems like ECM, ECCM, ELINT and ultrabroadband receivers. Low pass, high pass, band pass, diplexer and multiplexer designs can be realized with this technology with passband, stopband up to 50GHz and stopband width greater than 6x cutoff frequency.

ELECTRICAL SPECIFICATIONS AT +25°C

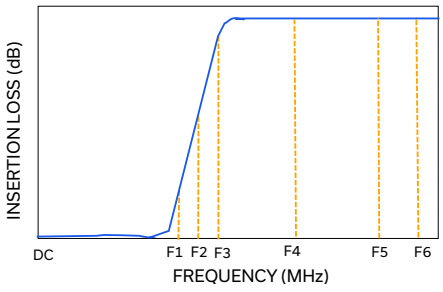
Parameter		F#	Frequency (GHz)	Min.	Typ.	Max.	Units
Passband	Insertion Loss	F4-F5	29 - 48	—	1	2	dB
		F5-F6	48 - 50	—	1.5	—	
	Return Loss	F4-F6	29 - 50	—	9.5	—	dB
Stopband	Rejection	DC-F1	DC - 18.5	60	80	—	dB
		F1-F2	18.5 - 21	40	60	—	
		F2-F3	21 - 22.5	20	40	—	

ABSOLUTE MAXIMUM RATINGS[1]

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
Input Power[2]	1 W @ 25°C

1. Permanent damage may occur if any of these limits are exceeded.
2. Power rating applies only to signals within the passband.

TYPICAL FREQUENCY RESPONSE



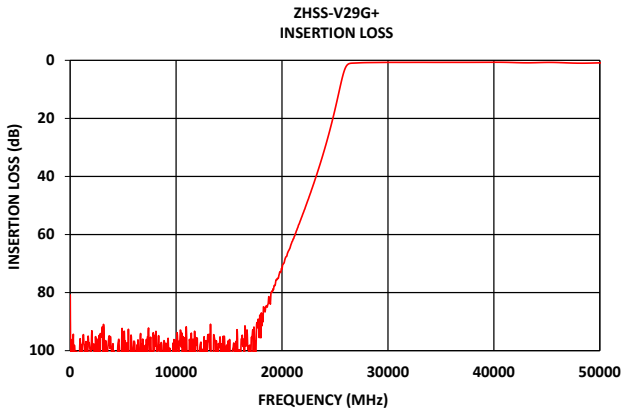
REV. OR
ECO-031162
EDU5276
ZHSS-V29G+
MCINU
260909

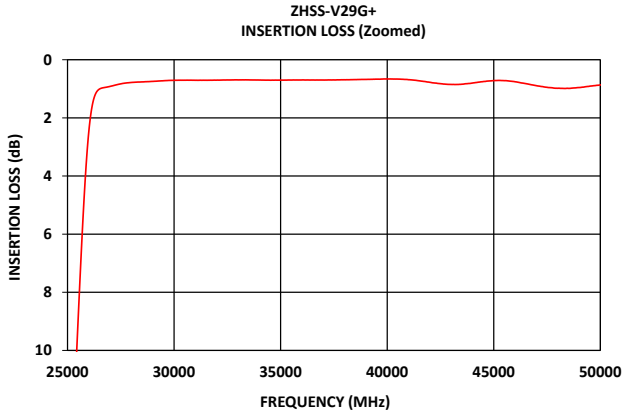
High Pass Filter

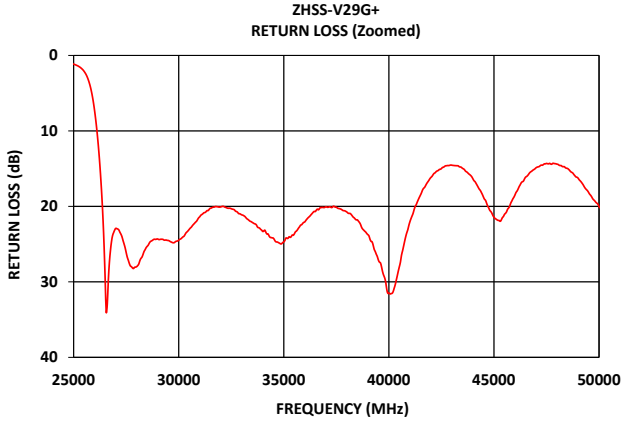
ZHSS-V29G+

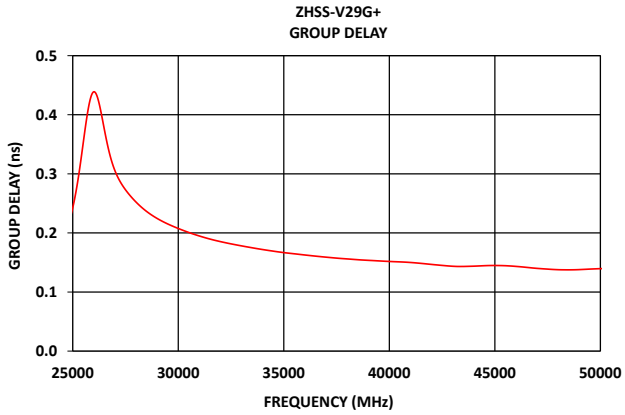
50Ω 29 to 50 GHz 2.4mm Female

TYPICAL PERFORMANCE GRAPHS AT +25°C









High Pass Filter

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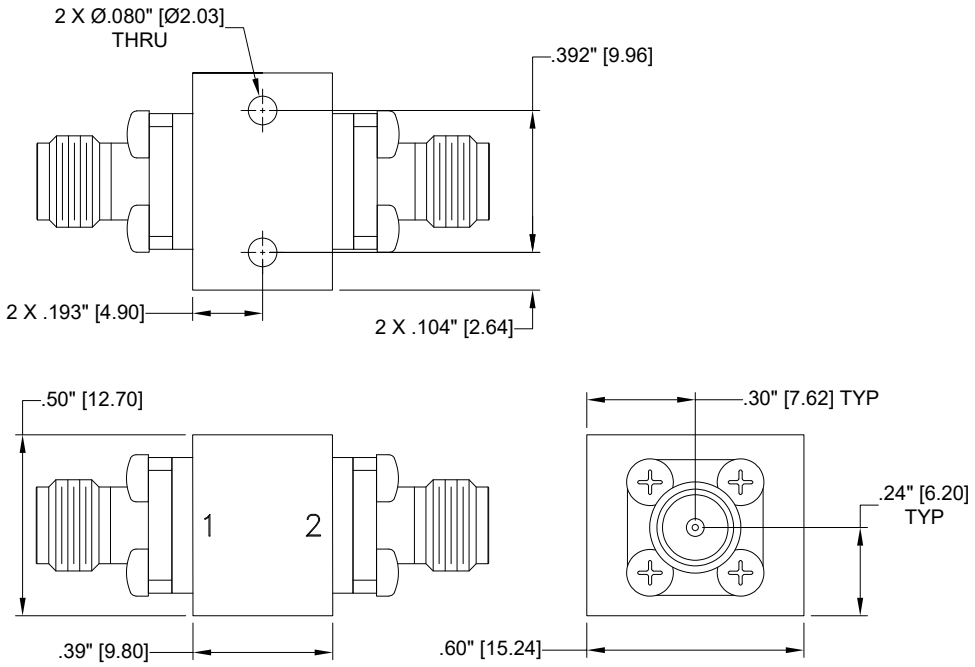
50Ω 29 to 50 GHz 2.4mm Female

CONNECTOR DESCRIPTION

Function	Connector
RF1[3]	2.4mm Female
RF2[3]	2.4mm Female

3. This filter is bi-directional, RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

CASE STYLE DRAWING



Unit Weight: 25 Grams.
Dimensions are in inches (mm). Tolerances: 2 Pl. ± 0.06[1.5]; 3 Pl. ± 0.015[0.38]

PRODUCT MARKING*: ZHSS-V29G+

*Marking may contain other features or characters for internal lot control.

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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD CLICK HERE

Performance Data & Graphs	Data Graphs S-Parameter (S2P Files) Data Set (.zip file)
Case Style	BCK3906
RoHS Status	Compliant
Environmental Ratings	ENV001

NOTES

A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
C. The parts covered by this specification document are subject to Mini-Circuits' standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html