



Mini-Circuits

SUSPENDED SUBSTRATE STRIPLINE COAXIAL

Diplexer

ZDSS-3G4G-25WS+

50Ω DC to 8000 MHz (DC-3000, 4000-8000MHz) SMA Female

KEY FEATURES

- Low passband Insertion Loss, 0.3 dB Typ.
- High Power Handling 25 W
- High Rejection, 80 dB Typ.
- Connectorized Package



Generic photo used for illustration purposes only

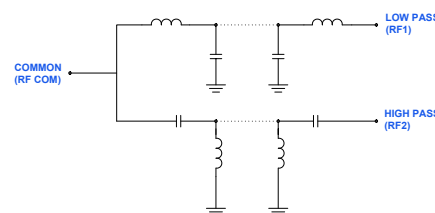
APPLICATIONS

- Aerospace
- Defense
- Ground Radio Communications

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 40GHz and stopband width greater than 6x cutoff frequency.

FUNCTIONAL DIAGRAM

ELECTRICAL SPECIFICATIONS¹ AT +25°C

Parameter		Function (Port)	Frequency (MHz)	Min.	Typ.	Max.	Unit
Passband	Insertion Loss	Low Pass (RF COM-RF1)	DC -3000	—	0.3	0.9	dB
		High Pass (RF COM-RF2)	4000 - 8000	—	0.3	1.0	
	Return Loss	Low Pass (RF1)	DC - 3000	—	15	—	dB
		High Pass (RF2)	4000 - 8000	—	12	—	
		Common (RF COM)	DC - 3000	—	15	—	
			4000 - 8000	—	12	—	
Stopband Rejection		Low Pass (RF COM-RF1)	4000 - 8000	15	30	—	dB
		High Pass (RF COM-RF2)	DC - 2000 2000 - 3000	60 —	80 15	— —	

1. RF COM & (RF1, RF2) can be used as input / output. See S-Parameters for actual performance.

ABSOLUTE MAXIMUM RATINGS²

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
Input Power (RF COM - RF1) ³	25 W @ +25°C
Input Power (RF COM - RF2) ³	25 W @ +25°C

2. Permanent damage may occur if any of these limits are exceeded.

3. Power rating applies only to signals within the passband.

www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. OR
ECO-027032
ZDSS-3G4G-25WS+
EDU4959
URJ
250919

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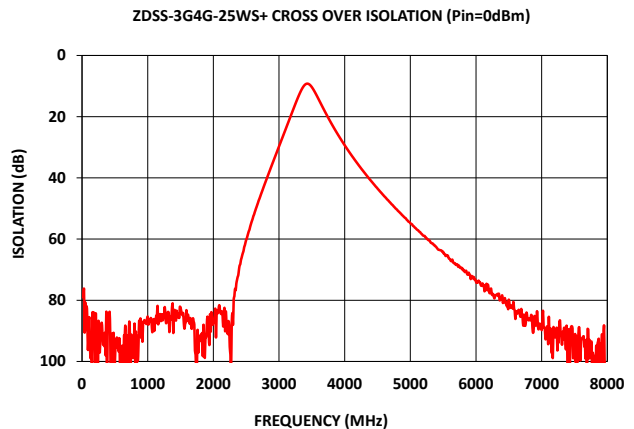
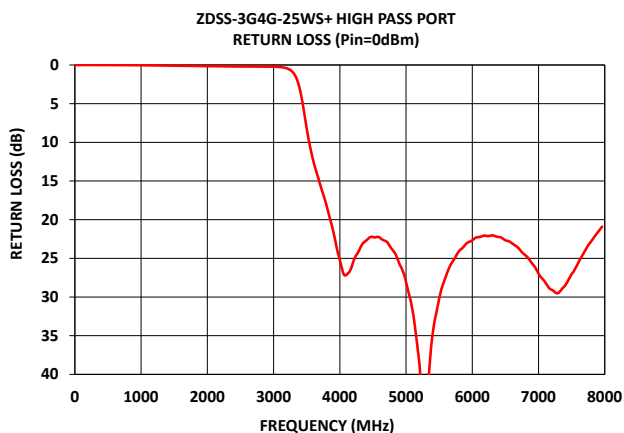
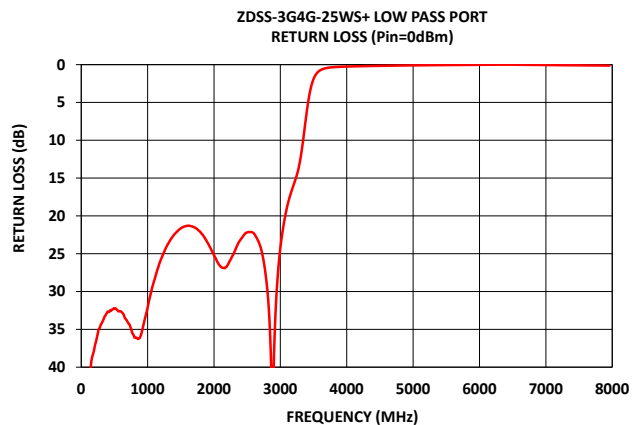
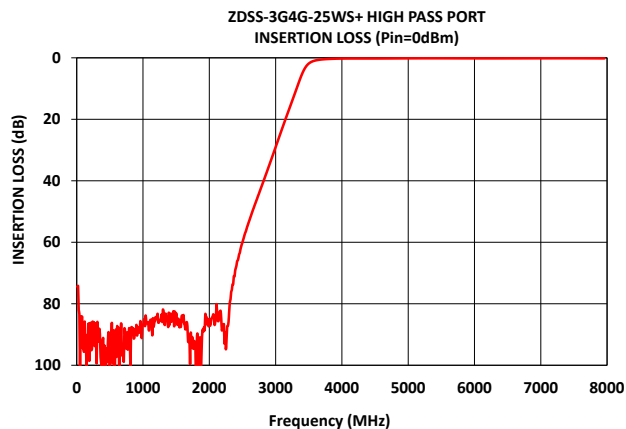
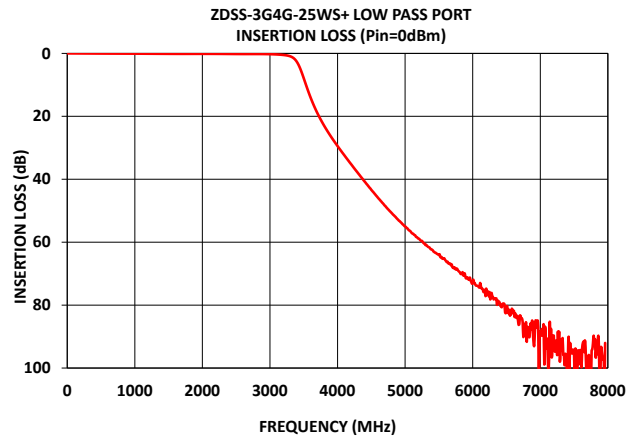
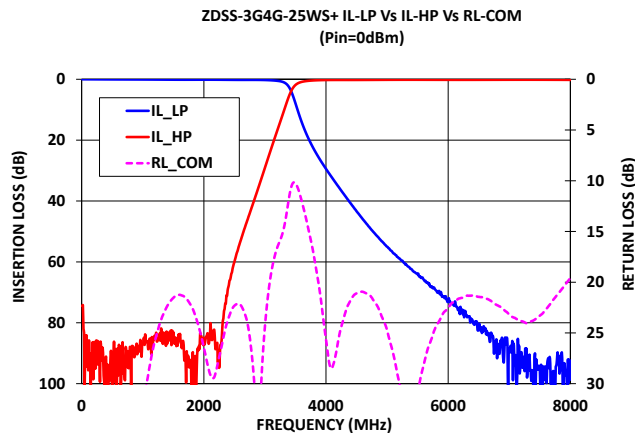
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TYPICAL PERFORMANCE GRAPHS





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Function	Marking on Unit	Connector
RF COM	1	SMA Female
RF1	2	SMA Female
RF2	3	SMA Female

Technical drawing of the 100 Series Solenoid Valve showing three views: top, front, and side. The top view shows a rectangular body with dimensions 1.80 [45.8] x .800 [20.32]. It features two ports labeled 1 and 2, and four mounting holes. The front view shows a cylindrical solenoid coil with dimensions .60 [15.2] x .74 [18.7] TYP. The side view shows a rectangular body with dimensions 1.10 [27.9] x .32 [8.0] TYP. Dimensions are given in inches and millimeters.

Dimensions are in inches [mm]. Tolerances: 2 Pl. $\pm .06$; 3 Pl. $\pm .015$

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





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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

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Performance Data & Graphs	Data
	Graphs
	S-Parameter (S3P Files) Data Set (.zip file)
Case Style	BAF3587
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

