(LTCC) COAXIAL

Diplexer

ZDPL-6G-S+

50Ω DC to 6000 (DC to 1650 , 2400-6000) MHz SMA Female

KEY FEATURES

- Low Insertion Loss 1.80 dB Typ
- Wideband Rejection 20 dB Typ
- Good return loss 16 dB Typ
- Temperature Stable
- Connectorized Package

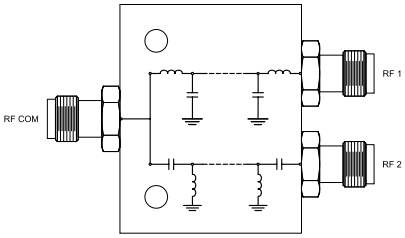


Generic photo used for illustration purposes only

APPLICATIONS

- Satelllite Communication systems
- Test and Measurement

FUNCTIONAL DIAGRAM



PRODUCT OVERVIEW

Mini-Circuits' Model-ZDPL-6G-S+ is a 50Ω good performance diplexer in a connectorized package with the Low pass port at DC-1650 MHz and High pass port at 2400-6000MHz.The model has Good return loss and rejection over extended frequency range.Easy to interface with other device and well suited for test setups.

ELECTRICAL SPECIFICATIONS AT [1]+25°C

Parameter		Function (Port)	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	Low Pass (RF COM-RF1)	DC - 1650	—	—	1.80	dB
		High Pass (RF COM-RF2)	2400 - 2500	—	—	2	
			2500 - 4200	—	—	1.80	
			4200 - 6000	—	—	2	
	Return Loss	Low Pass (RF1)	DC - 1650	—	16	—	dB
		High Pass (RF2)	2400 - 2500	—	12	—	
			2500 - 4200	—	10	—	
			4200 - 6000	—	13	—	
		Common (COM)	DC - 1650	—	16	—	
			2400 - 2500	—	12	—	
			2500 - 4200	—	10	—	
			4200 - 6000	—	13	—	
Stop Band	Rejection	Low Pass (RF COM-RF1)	2400 - 4200	—	15	—	dB
			4200 - 6000	—	20	—	
		High Pass (RF COM-RF2)	DC - 200	—	20	—	
			200 - 1400	—	14	—	
			1400 - 1650	—	16	—	

1.This component should not be used as a DC-block. In applications where DC voltage and/or current is present either the input or outpt ports,external DC blocking capacitors are required.

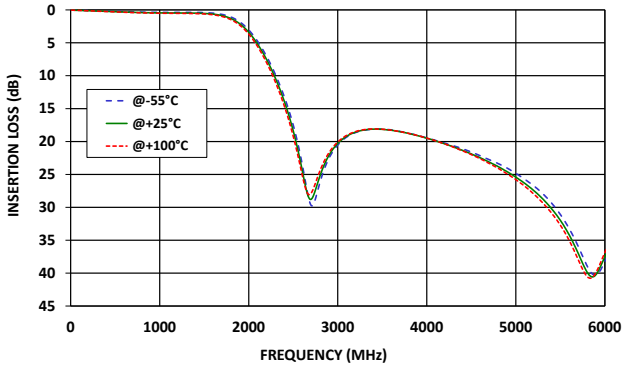
ABSOLUTE MAXIMUM RATINGS[2]

Operating Temperature	-55 °C to +100 °C
Storage Temperature	-55 °C to +100 °C
Input Power (RF COM)[3]	5.5W
Input Power (RF1)[4]	5.5W
Input Power (RF2)[5]	5.5W

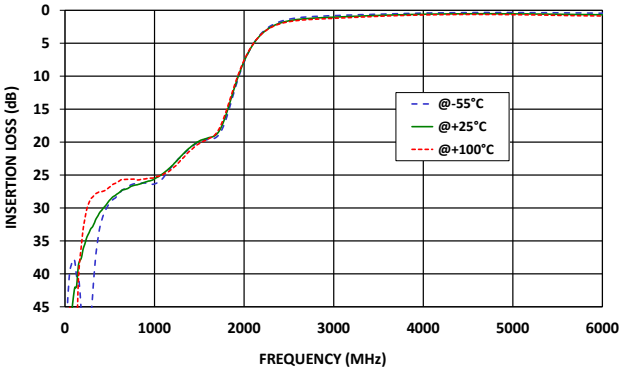
2. Permanent damage may occur if any of these limits are exceeded.
3. Power rating applies only to signals within the passband. Power rating above +25°C operating temperature decreases linearly to 2.1 W at +100°C.
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TYPICAL PERFORMANCE GRAPHS

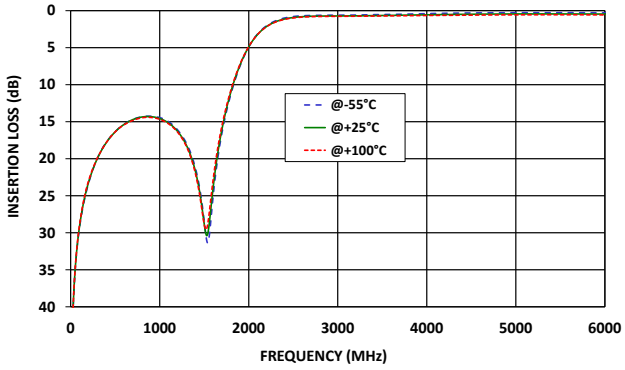
ZDPL-6G-S+LOW PASS
INSERTION LOSS



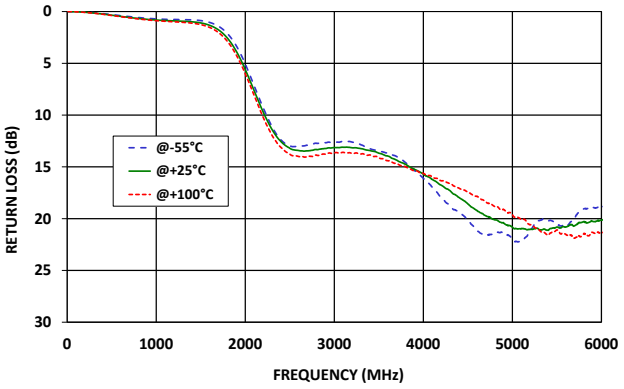
ZDPL-6G-S+LOW PASS
RETURN LOSS



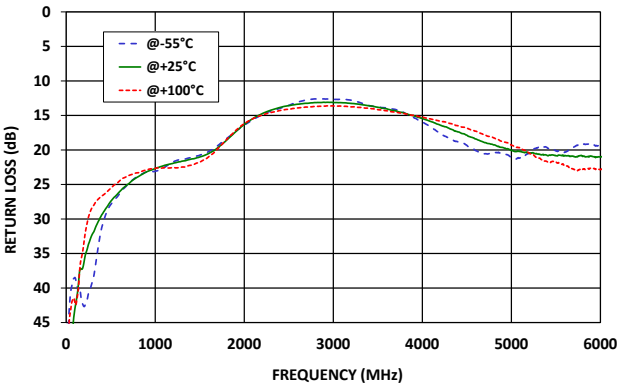
ZDPL-6G-S+HIGH PASS
INSERTION LOSS



ZDPL-6G-S+HIGH PASS
RETURN LOSS



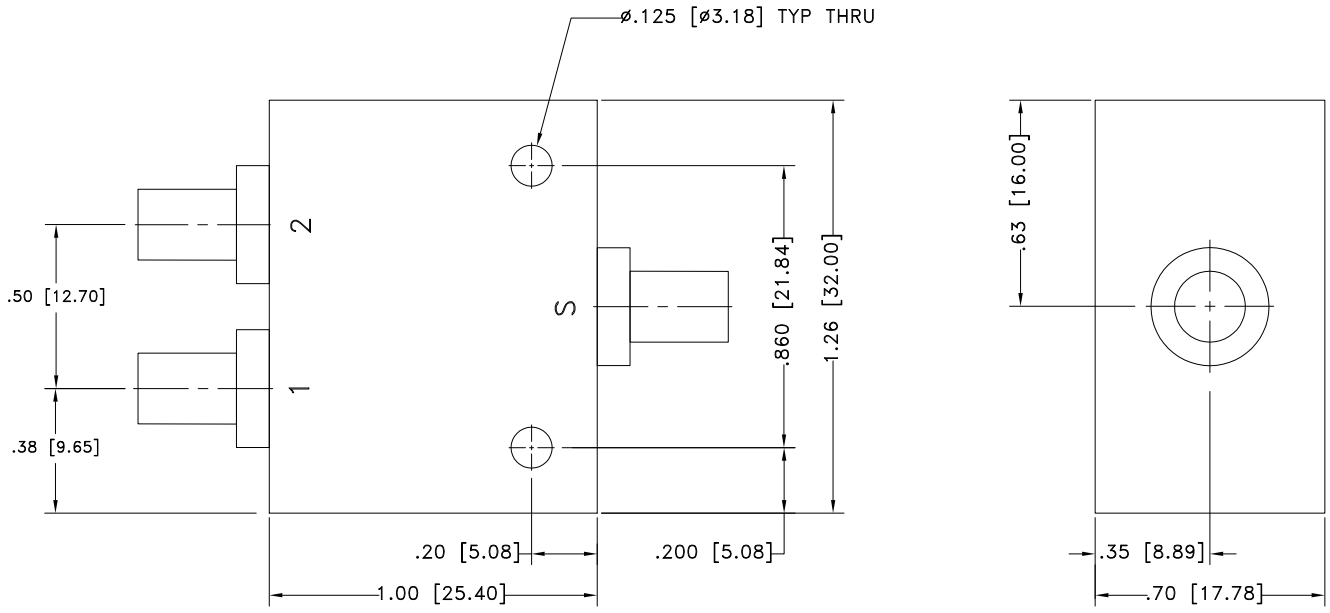
ZDPL-6G-S+ COMMON PORT



CONNECTOR DESCRIPTION

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

CASE STYLE DRAWING



Unit Weight: 24.0 Grams.
Dimensions are in inches (mm). Tolerances: 2 Pl. ± .03; 3 Pl. ± .015

PRODUCT MARKING*: ZDPL-6G-S+

*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 (SXP Files) Data Set (.zip file)
Case Style	F183
RoHS Status	Compliant
Environmental Ratings	ENV46

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