



COAXIAL

# Bias-Tee/Diplexer

# Z4BT-2R15GW+

50Ω (10-100, 950-2150) MHz SMA, BNC Female

### KEY FEATURES

- Integrated Multifunctional L-Band+DC Bias-Tee + Common Reference Inject
- DC Pass Through: 2A, 48V
- Low Insertion Loss, 0.5 dB Typ.
- Good Isolation, 50 dB Typ.



Generic photo used for illustration purposes only

### APPLICATIONS

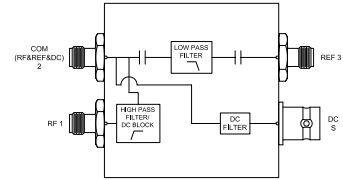
- Satellite Communications
- Wireless Infrastructure
- Medical Equipment
- Test Accessory

### PRODUCT OVERVIEW

Mini-Circuits' Z4BT-2R15GW+ is a combination of bias tee and diplexer designed to support L-B and communications application. Ideally suited for satellite communication installations, the Z4BT-2R15GW+ combines wide band, flat response bias tee performance with additional functionality to inject 100MHz reference clock in a single compact design. Built in a rugged shielded case, the Z4BT-2R15GW+ is equipped with SMA, BNC Female connectors for all ports.

The Z4BT-2R15GW+ is ideally suited for powering Satellite up converters and LNBs where IF, DC and 100MHz clock reference are all injected on a single coax cable.

### FUNCTIONAL DIAGRAM



### ELECTRICAL SPECIFICATIONS AT +25°C

Parameter	Function (Port)	Frequency (MHz)	Min.	Typ.	Max.	Units
Frequency Range	—	—	10	—	2150	MHz
Insertion Loss	REF to Common	10 - 100	—	0.5	0.7	dB
	RF to Common	950 - 2150	—	0.7	1.5	
Return Loss	Common to REF	10 - 100	12	20	—	dB
	RF & Common	950 - 2150	12	18	—	
Isolation	REF to RF	10 - 100	40	50	—	dB
	RF to DC	10 - 100	60	70	—	
	Common to DC	10 - 100	27	40	—	
	REF to DC	10 - 100	27	40	—	
	RF to REF	950 - 2150	35	50	—	dB
	RF to DC	950 - 2150	30	50	—	
	Common to DC	950 - 2150	30	50	—	
	REF to DC	950 - 2150	30	50	—	
DC Resistance	DC to RF&REF&DC	—	—	0.5	—	Ohm

### ABSOLUTE MAXIMUM RATINGS<sup>1</sup>

Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
Input Power	30 dBm Max.
Voltage at DC Port	+48 V Max.
Current at DC Port	2 A

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





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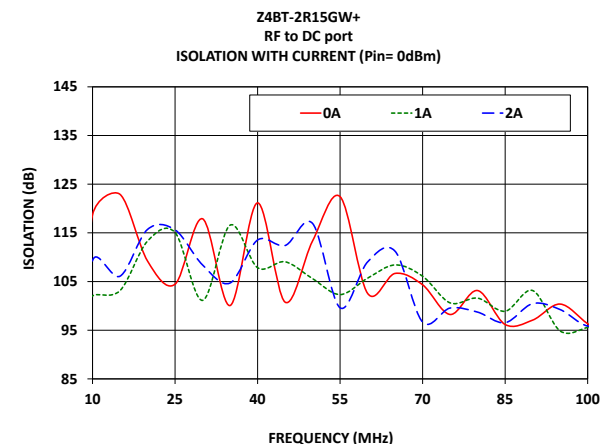
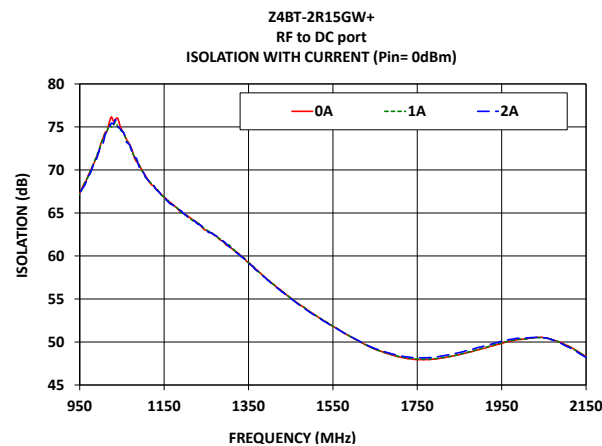
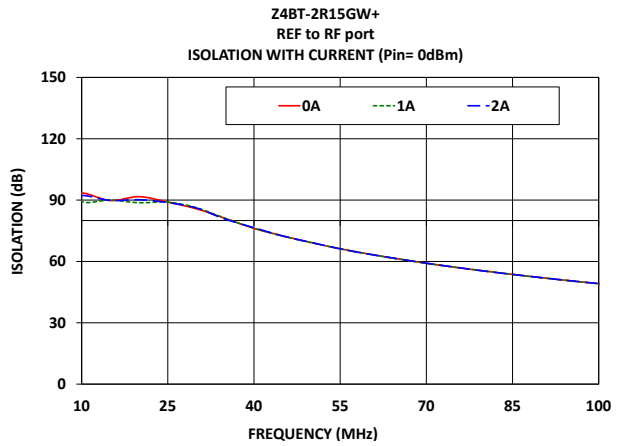
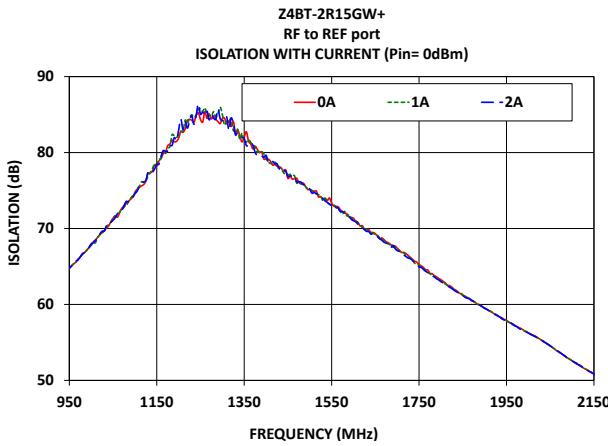
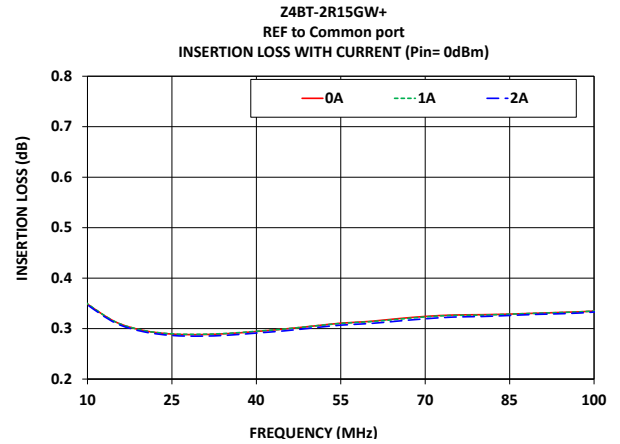
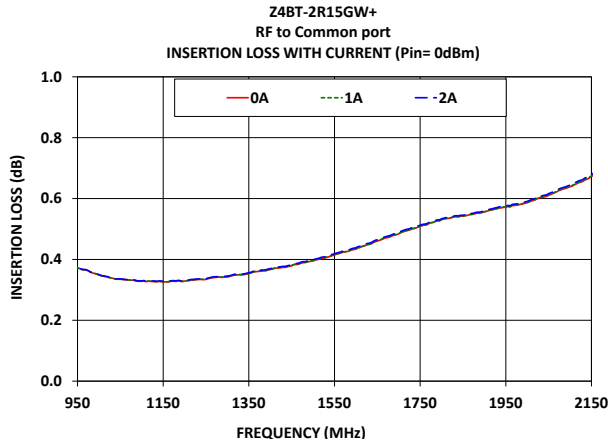
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### TYPICAL PERFORMANCE GRAPHS





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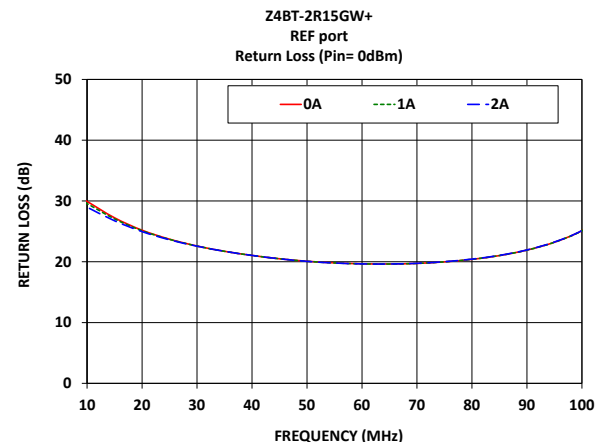
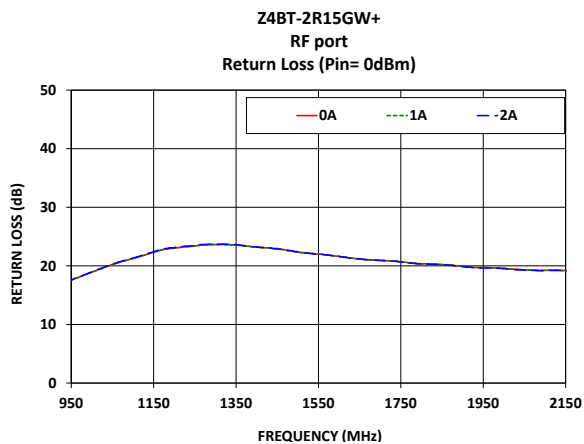
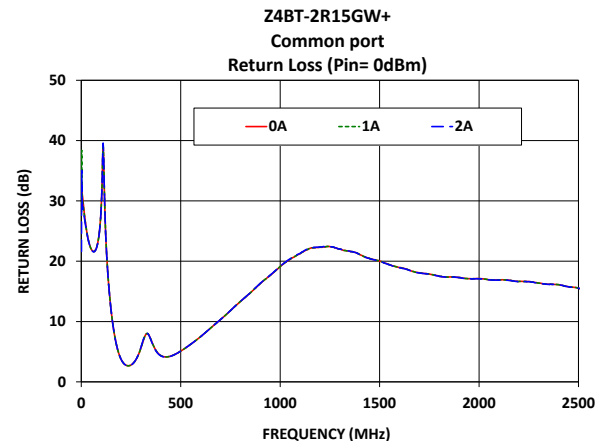
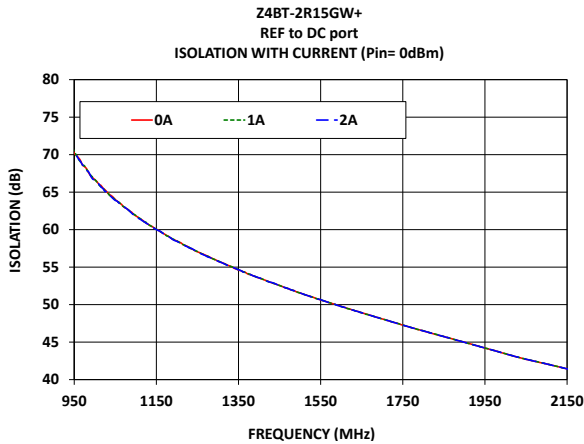
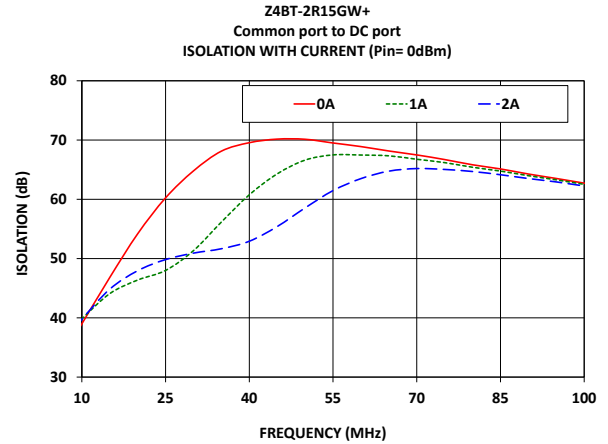
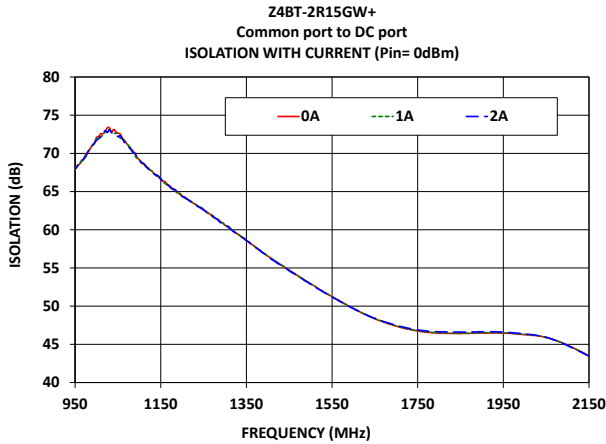
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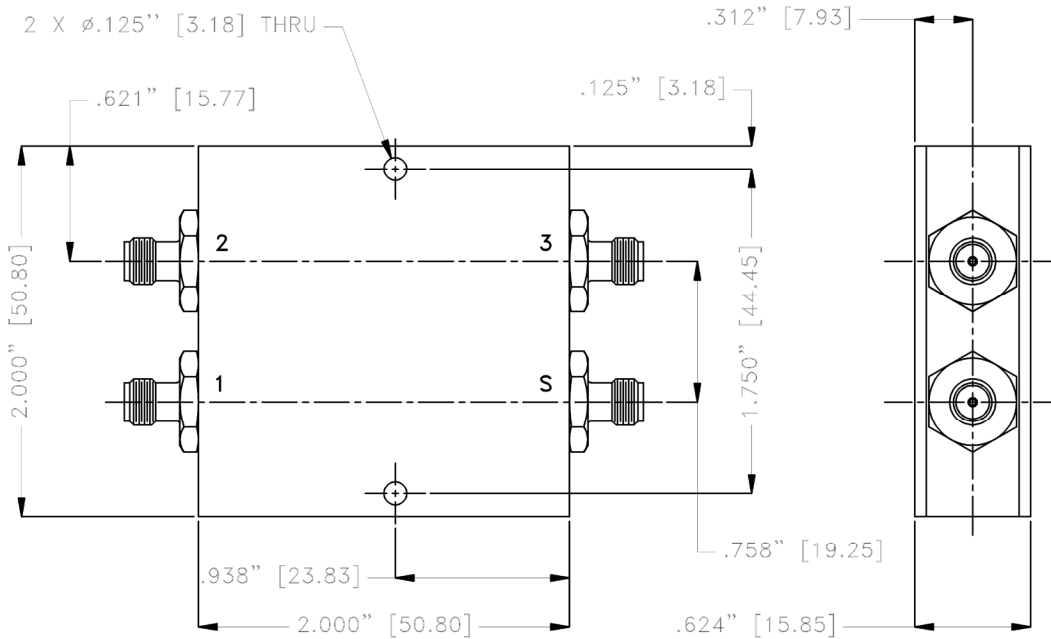
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### COAXIAL CONNECTIONS

Description	RF PORT	COM (RF&REF&DC) PORT	REF PORT	DC PORT
Connector Type	SMA Female	SMA Female	SMA Female	BNC Female
Orientation	1	2	3	S

### CASE STYLE DRAWING



Unit Weight: 99 Grams.  
 Dimensions are in inches (mm). Tolerances: 2 Pl. ± .03; 3 Pl. ± .015

### PRODUCT MARKING\*: Z4BT-2R15GW+

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





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Mini-Circuits

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

Performance Data & Graphs	Data
	Graphs
	S-Parameter (S4P Files) Data Set (.zip file)
Case Style	CC1823
RoHS Status	Compliant
Environmental Ratings	ENV28T19

- 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-Circuit's 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](http://www.minicircuits.com/terms/viewterm.html)

