RACK-MOUNTED

Splitter / Combiner Rack ZT-402

50 Ω 30-2000 MHz 2 x 8-Way SMA Female

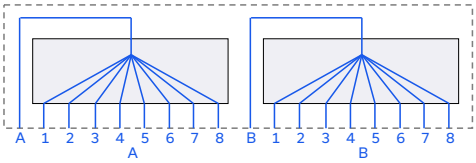
THE BIG DEAL

- Rack-mounted RF splitter / combiner system
- 2 x 8-way splitters in 1U rack space
- All connectors on the front panel
- Wide band

Front View

Generic photo used for illustration purposes only

FUNCTIONAL BLOCK DIAGRAM



APPLICATIONS

- Production test setups
- Military VHF / UHF radio testing
- GNSS (GPS, Galileo, GLONASS) signal distribution
- Test instrumentation time synchronization

PRODUCT OVERVIEW

Mini-Circuits' rack-mounted test solutions enable convenient integration of any combination of passive or active RF and microwave components within complex production test environments. A wide range of standard configurations are supplied from stock, with custom configurations available upon request.

ZT-402 integrates 2 x 8-way splitter / combiners into a compact rack-mounted chassis requiring only 1U of rack space. Each splitter covers an exceptionally wide bandwidth of 30-2000 MHz with high isolation, ideally suited for applications in the VHF, UHF and L bands.

The system is configured with all SMA RF connectors on the front for easy access within a rack-mounted test environment.

ELECTRICAL SPECIFICATIONS AT +25°C (EACH SPLITTER)

Parameter	Conditions	Min	Typ	Max	Units
Frequency		30		2000	MHz
Insertion Loss	Above theoretical 9 dB loss, 30 – 500 MHz		3.0	4.0	dB
	Above theoretical 9 dB loss, 500 – 2000 MHz		5.0	7.0	
Isolation	30 – 500 MHz	20	25		dB
	500 – 2000 MHz	18	20		
Return Loss	Sum ports, 30 – 500 MHz		11		dB
	Sum ports, 500 – 2000 MHz		8		
	Ports 1-8, 30 – 500 MHz		22		
	Ports 1-8, 500 – 2000 MHz		17		
Input Power	As a splitter into load with 2:1 max VSWR			+28	dBm

REV. A
ECO-022135
ZTM-402
MCL NY
240618

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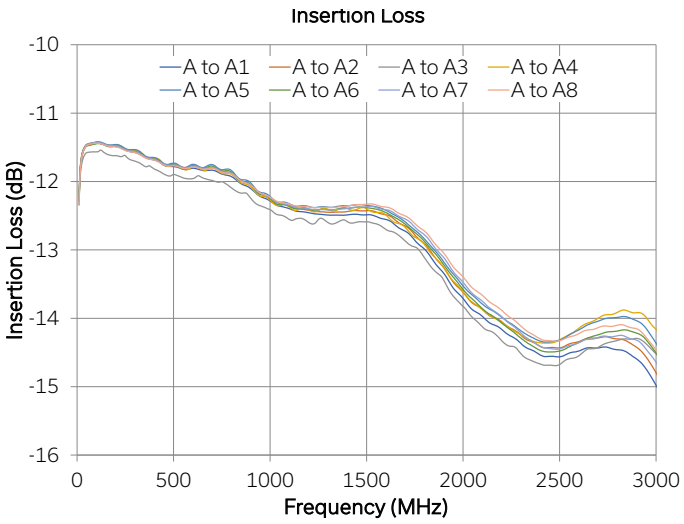
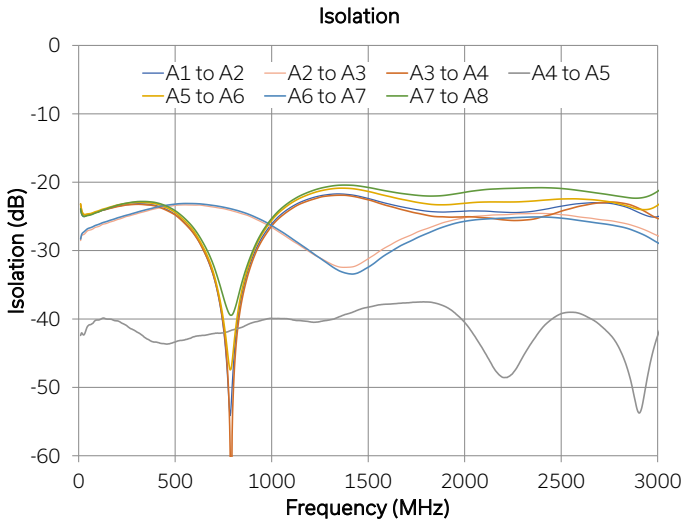
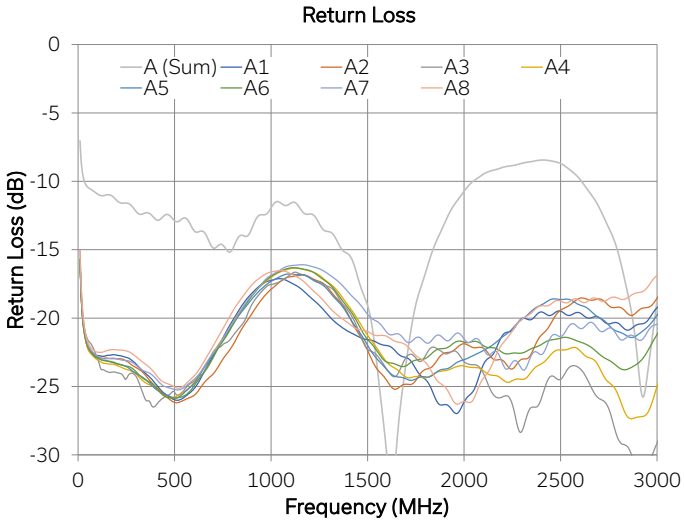
TYPICAL PERFORMANCE GRAPHS







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ABSOLUTE MAXIMUM RATINGS

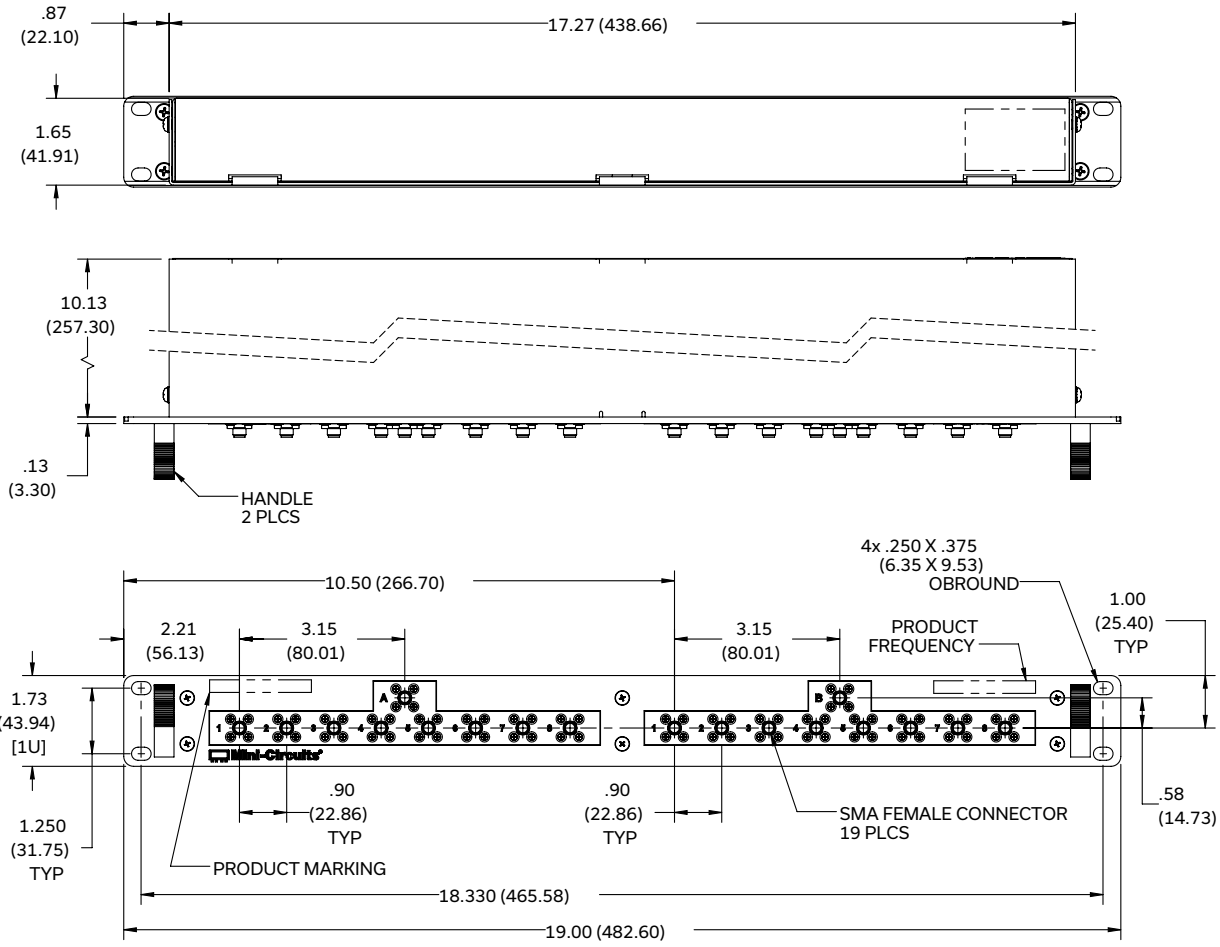
Parameter	Conditions	Limits	Units
Temperature	Operating	0 to +50	°C
	Storage	-20 to +60	

Permanent damage may occur if any of these limits are exceeded. Operating in the range between operating power limits and absolute maximum ratings for extended periods of time may result in reduced life and reliability.

CONNECTIONS

Port	Function	Connector
A & B	Sum port	SMA female
A1-8 & B1-8	Input / output port	SMA female

CASE STYLE DRAWING



Weight: 1860 grams.
Dimensions are in inches (mm). Tolerances: 2 Pl.±.03 inch; 3 Pl.±.015 inch.

PRODUCT MARKING*

Product Marking: ZT-402
Product Frequency: 30-2000 MHz
Unit ID Label: Serial number and other identification marks
*Marking may contain other features or characters for internal lot control

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DETAILED MODEL INFORMATION IS AVAILABLE ON OUR WEBSITE CLICK HERE

Case Style	AAS3583
Environmental Rating	ENV55
Regulatory Compliance	Refer to our website for compliance methodologies and qualifications CE UKCA www.minicircuits.com/quality/environmental_introduction.html

Contact Us: testsolutions@minicircuits.com

Included Accessories	Part Number	Description
	HT-4-SMA	SMA connector wrench (4" length)

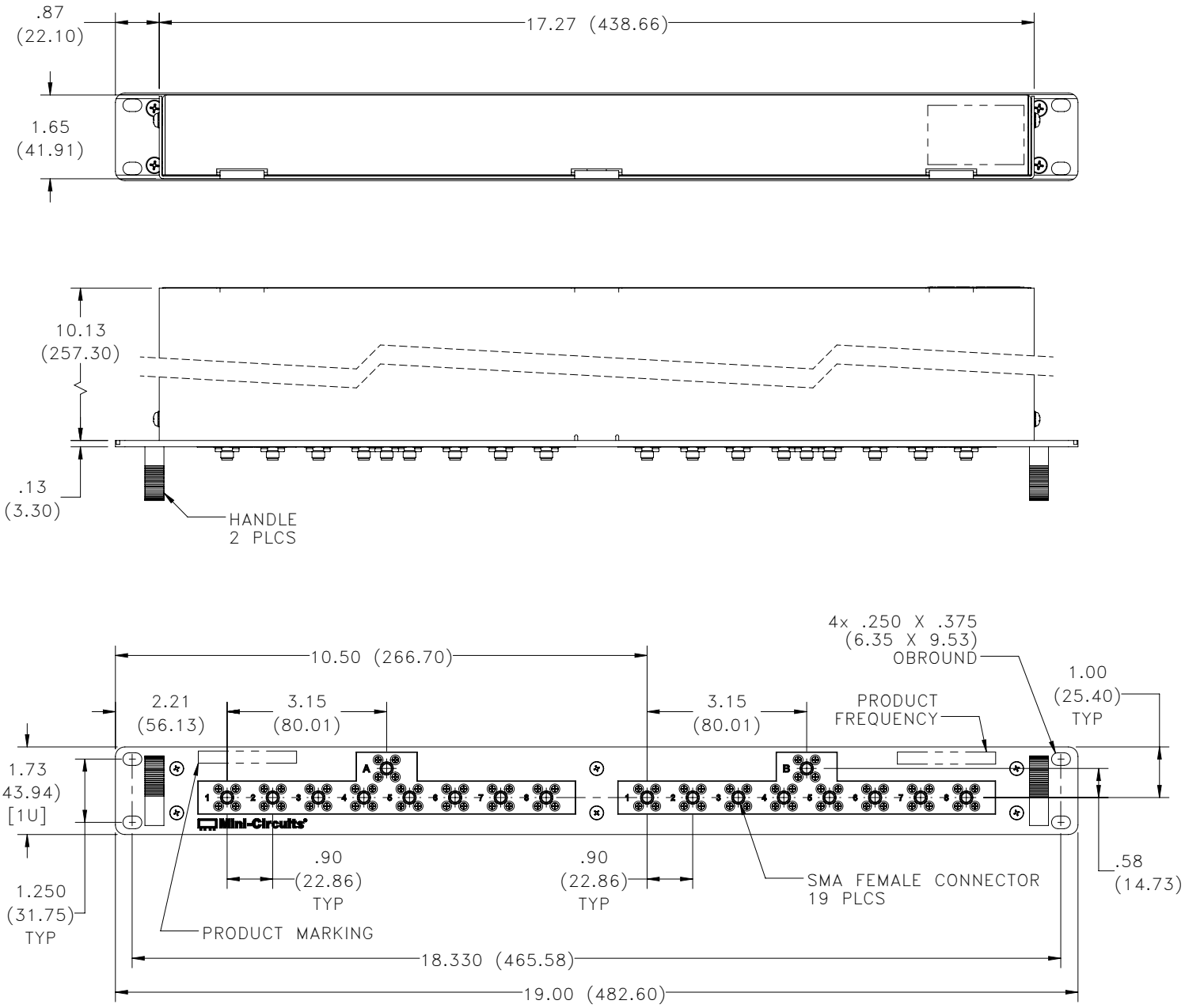
NOTES

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

Case Style AAS

Outline Dimensions

AAS3583



Notes:

1. Case material: Aluminum (with protective coating to prevent corrosion).
2. Dimensions are in inches (mm). Tolerances: 2 Pl. ±.03 inch; 3 Pl. ±.015 inch.
3. Weight: 1860 grams.
4. Marking may contain other features or characters for internal lot control.

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Mini-Circuits

Environmental Specifications **ENV55**

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec
Operating Temperature	-0° to 50° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-20° to 60° C Ambient Environment	Individual Model Data Sheet
Operating and Storage Humidity	5% to 85% RH (non-condensing)	Ambient
Bench Handling Test	Bench Top Tip 45° & Drop	MIL-PRF-28800F
Transit Drop Test	Free Fall Drop, 20 cm (7.9 inches)	MIL-PRF-28800F Class 3

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