



RACK-MOUNTED

# Splitter / Combiner Rack

# ZT-406

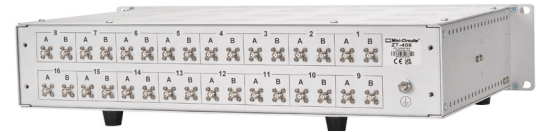
50 Ω 800-2200 MHz 16 x 2-Way SMA Female

### THE BIG DEAL

- Rack-mounted RF splitter / combiner system
- 16 x 2-way splitters in 2U rack space
- In-line connector configuration
- Wide band



Front View



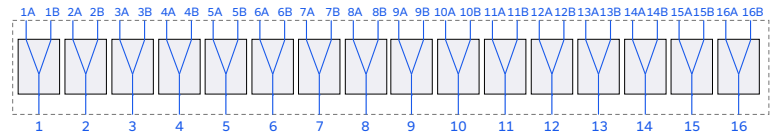
Back View

Generic photo used for illustration purposes only

### APPLICATIONS

- Production test setups
- L-band satcom (satellite communications)
- GNSS (GPS, Galileo, GLONASS) signal distribution
- Test instrumentation time synchronization

### FUNCTIONAL BLOCK DIAGRAM



### 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-406 integrates 16 x 2-way splitter / combiners into a compact rack-mounted chassis requiring only 2U of rack space. Each splitter covers L-band 800-2200 MHz with low insertion loss and high isolation, ideally suited for satcom and GNSS (GPS, GLONASS & Galileo) signal distribution applications.

The orientation of the SMA connectors supports straight-through connections within the rack, with the sum ports accessible on the front panel and ports 1-2 of each splitter on the rear.

### ELECTRICAL SPECIFICATIONS AT +25°C (EACH SPLITTER)

Parameter	Conditions	Min	Typ	Max	Units
Frequency		800		2200	MHz
Insertion Loss	Above theoretical 3 dB loss		1.0	2.0	dB
Isolation	800 – 2200 MHz	17	24		dB
Return Loss	Sum ports		15		dB
	Ports 1-2		17		dB
Input Power	As a splitter into load with 2:1 max VSWR			1.0	W
	Internal dissipation			0.75	W

REV. A  
ECO-022135  
ZTM-406  
MCL NY  
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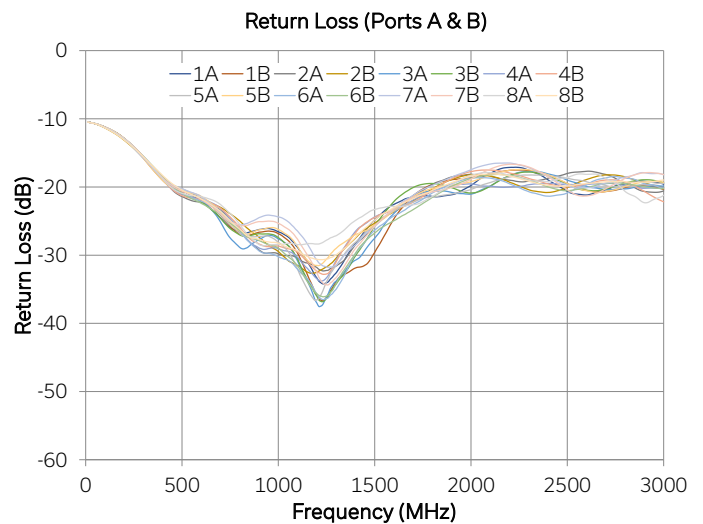
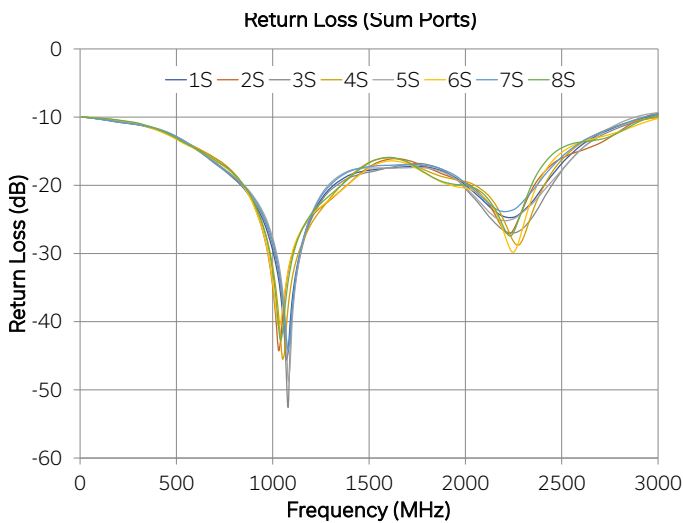
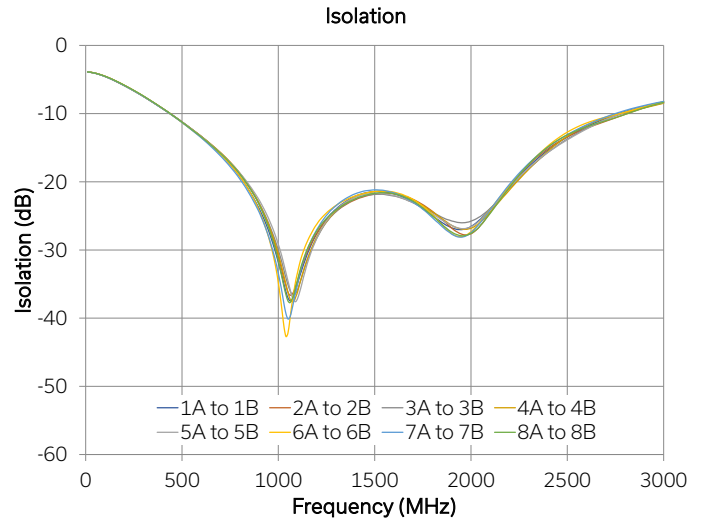
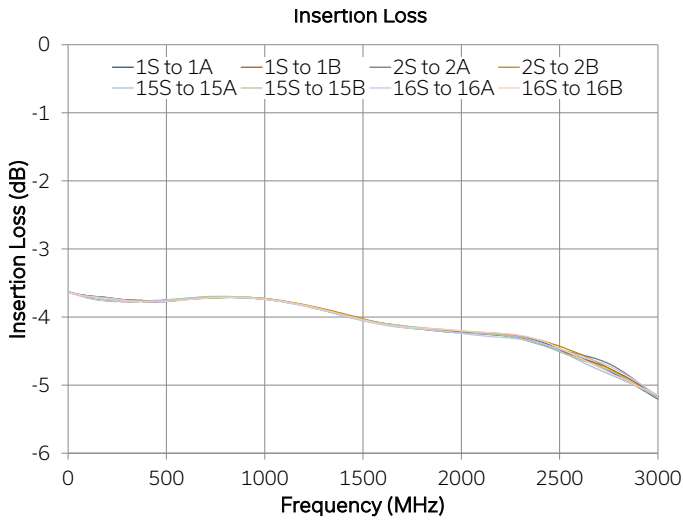
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Mini-Circuits

50  $\Omega$  800-2200 MHz 16 x 2-Way SMA Female

## TYPICAL PERFORMANCE GRAPHS





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### ABSOLUTE MAXIMUM RATINGS

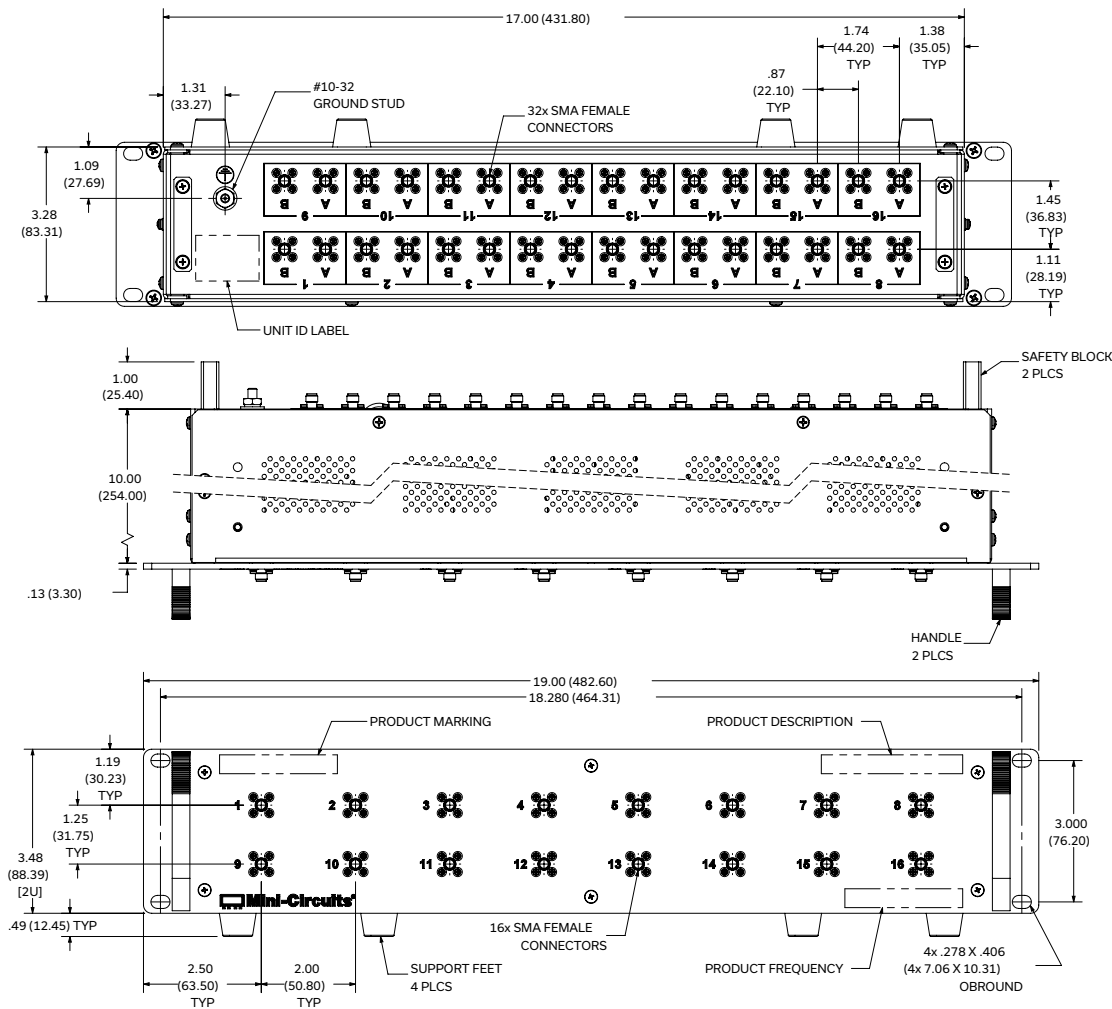
Parameter	Conditions	Limits	Units
Temperature	Operating	0 to +50	°C
	Storage	-20 to +60	

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
1-16	Sum port	SMA female
1A & 1B to 16A & 16B	Input / output ports	SMA female

### CASE STYLE DRAWING



Weight: 3040 grams.  
Dimensions are in inches (mm). Tolerances: 2 Pl.±.03 inch; 3 Pl.±.015 inch.

### PRODUCT MARKING\*

Product Marking: ZT-406  
Product Description: 16 x 2-Way Splitter Array  
Product Frequency: 800-2200 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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# Splitter / Combiner Rack

ZT-406


Mini-Circuits

50 Ω 800-2200 MHz 16 x 2-Way SMA Female

DETAILED MODEL INFORMATION IS AVAILABLE ON OUR WEBSITE [CLICK HERE](#)

Case Style	AAT3608	
Environmental Rating	ENV55	
Regulatory Compliance	<p>Refer to our website for compliance methodologies and qualifications</p> 	<a href="http://www.minicircuits.com/quality/environmental_introduction.html">www.minicircuits.com/quality/environmental_introduction.html</a>

Contact Us: [testsolutions@minicircuits.com](mailto:testsolutions@minicircuits.com)

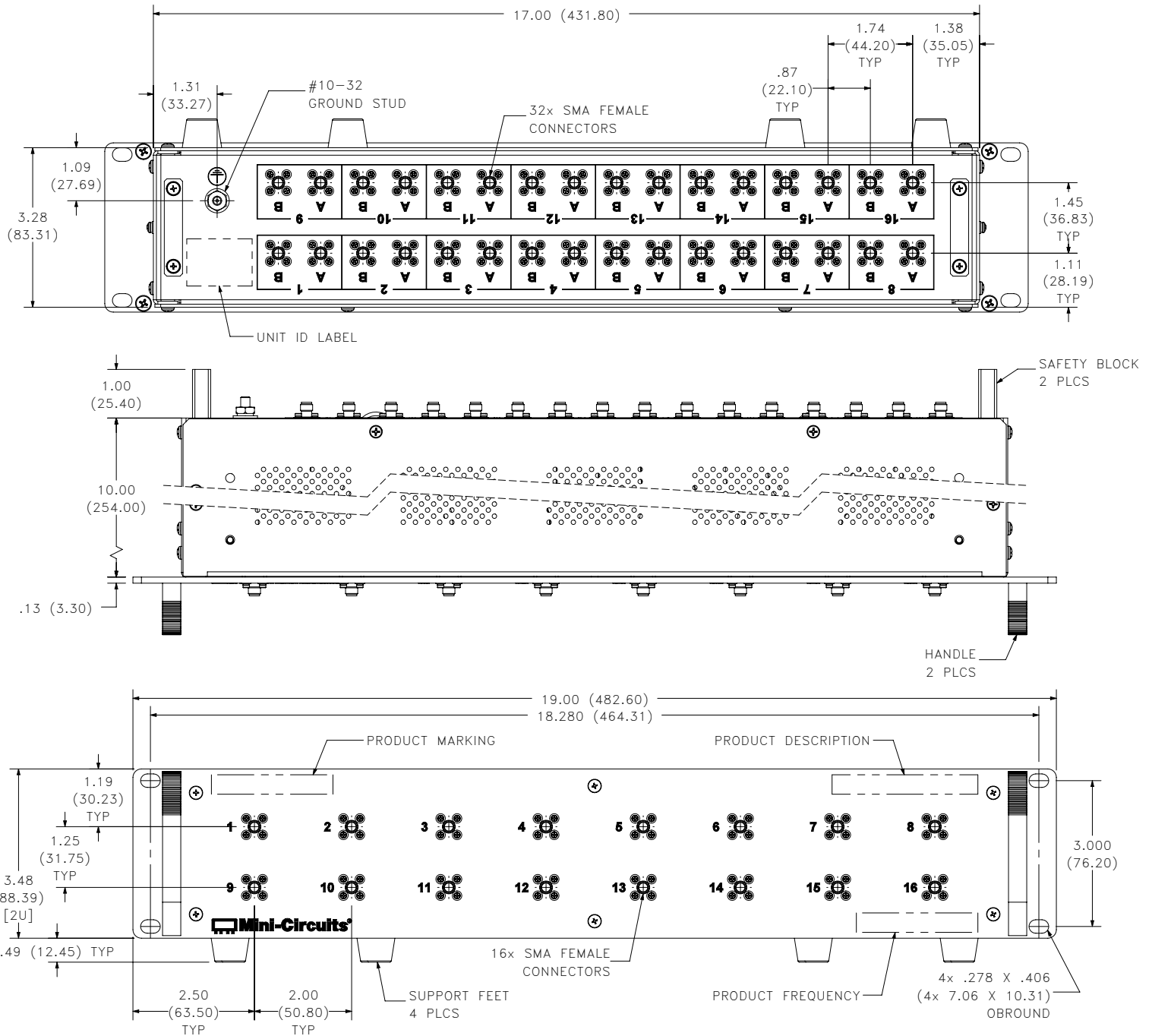
Included Accessories	Part Number	Description
	HT-4-SMA	SMA connector wrench (4" length)

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



## Outline Dimensions

AAT3608



### Notes:

1. Case material: Aluminum (with protective coating to prevent corrosion).
2. Dimensions are in inches (mm). Tolerances: 2 Pl.  $\pm .03$  inch; 3 Pl.  $\pm .015$  inch.
3. Weight: 3040 grams.
4. Marking may contain other features or characters for internal lot control.



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



The Design Engineers Search Engine Provides ACTUAL Data Instantly From MINI-CIRCUITS At: [www.minicircuits.com](http://www.minicircuits.com)

RF/IF MICROWAVE COMPONENTS



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