



RACK-MOUNTED

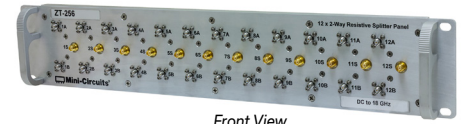
# Splitter / Combiner Panel

ZT-256

50 Ω DC to 18 GHz 12 x 2-Way SMA Female

## THE BIG DEAL

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



Front View



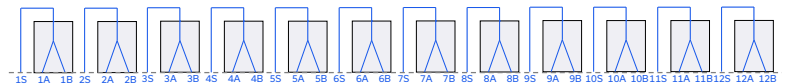
Rear View

Generic photo used for illustration purposes only

## APPLICATIONS

- Production test setups
- Satcom signal distribution
- Quantum computing
- 5G FR1, Bluetooth & WiFi signal distribution

## FUNCTIONAL BLOCK DIAGRAM



## PRODUCT OVERVIEW

Mini-Circuits panel-mounted structures provide clean, organized management of cable runs and connections in complex, high volume test setups. Multiple connector adapters, power splitters, directional couplers and other essential RF components and test accessories can be integrated efficiently within the test system. Custom configurations are available upon request.

ZT-256 integrates 12 x 2-way splitter / combiners on to a compact panel requiring only 2U of rack space. The wideband resistive design of the splitters achieves close to the ideal 6 dB insertion loss and isolation across the full bandwidth from DC-18 GHz.

The panel 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		DC		18	GHz
Insertion Loss	DC - 6 GHz		6.5	7.3	dB
	6 - 12 GHz		7.1	8.0	
	12 - 18 GHz		8.0	8.7	
Isolation	DC - 6 GHz	5.0	6.2		dB
	6 - 12 GHz	5.5	6.5		
	12 - 18 GHz	6.0	7.0		
Return Loss	DC - 6 GHz		25		dB
	6 - 12 GHz		20		
	12 - 18 GHz		12		
Input Power	As a splitter			+20	dBm

REV. A  
ECO-022135  
ZTM-256  
MCL NY  
240618





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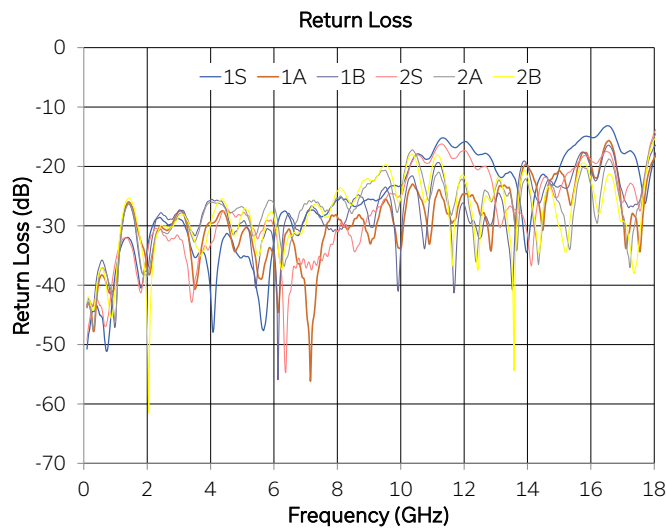
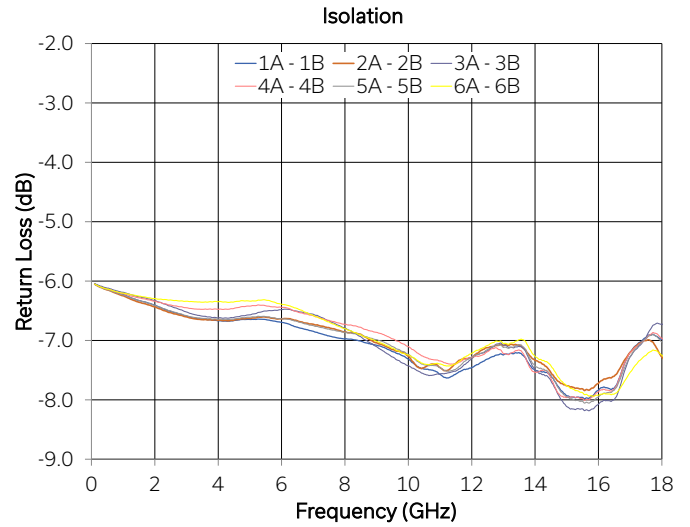
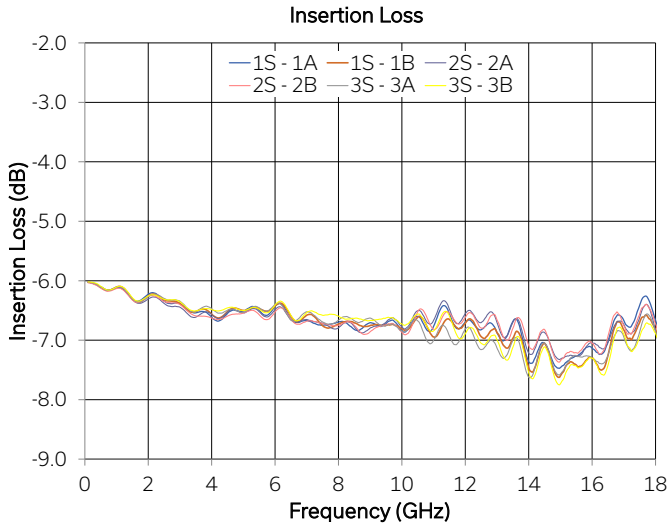
# Splitter / Combiner Panel

ZT-256

Mini-Circuits

50  $\Omega$  DC to 18 GHz 12 x 2-Way SMA Female

## TYPICAL PERFORMANCE GRAPHS





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50 Ω DC to 18 GHz 12 x 2-Way SMA Female

### ABSOLUTE MAXIMUM RATINGS

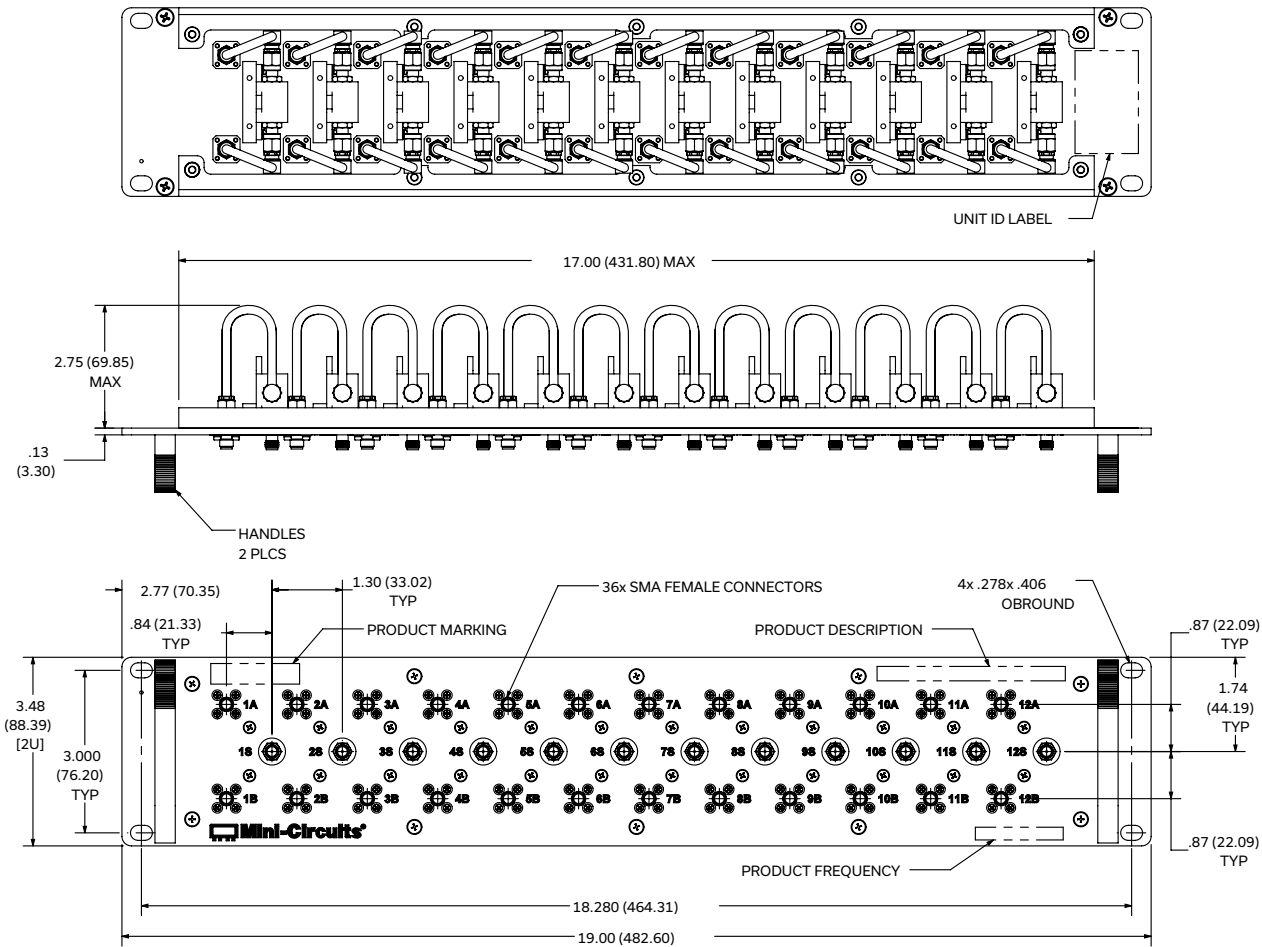
Parameter	Conditions	Limits	Units
Temperature	Operating	0 to +50	°C
	Storage	-20 to +60	

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	Connector
Splitter 1-12, ports S, A & B	SMA female

### CASE STYLE DRAWING



Weight: 1240 grams.

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

### PRODUCT MARKING\*

Product Marking: ZT-256

Product Description: 12 x 2-Way Resistive Splitter Panel

Product Frequency: DC to 18 GHz

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 Panel

ZT-256


Mini-Circuits

50 Ω DC to 18 GHz 12 x 2-Way SMA Female

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

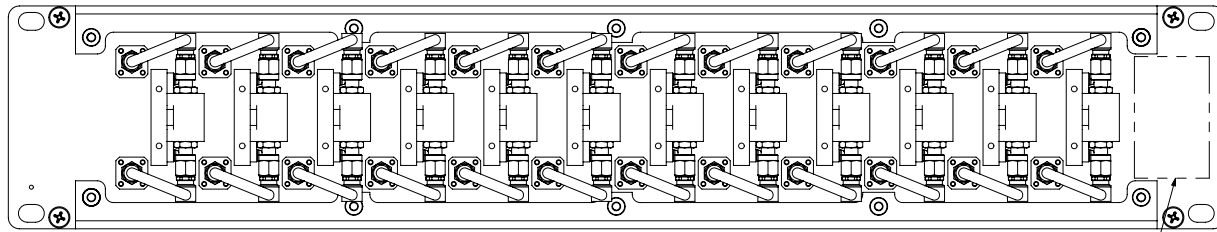
Case Style	AAR2582	
Environmental Rating	ENV55	
Regulatory Compliance	<p>Refer to our website for compliance methodologies and qualifications</p> 	<p><a href="http://www.minicircuits.com/quality/environmental_introduction.html">www.minicircuits.com/quality/environmental_introduction.html</a></p>

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

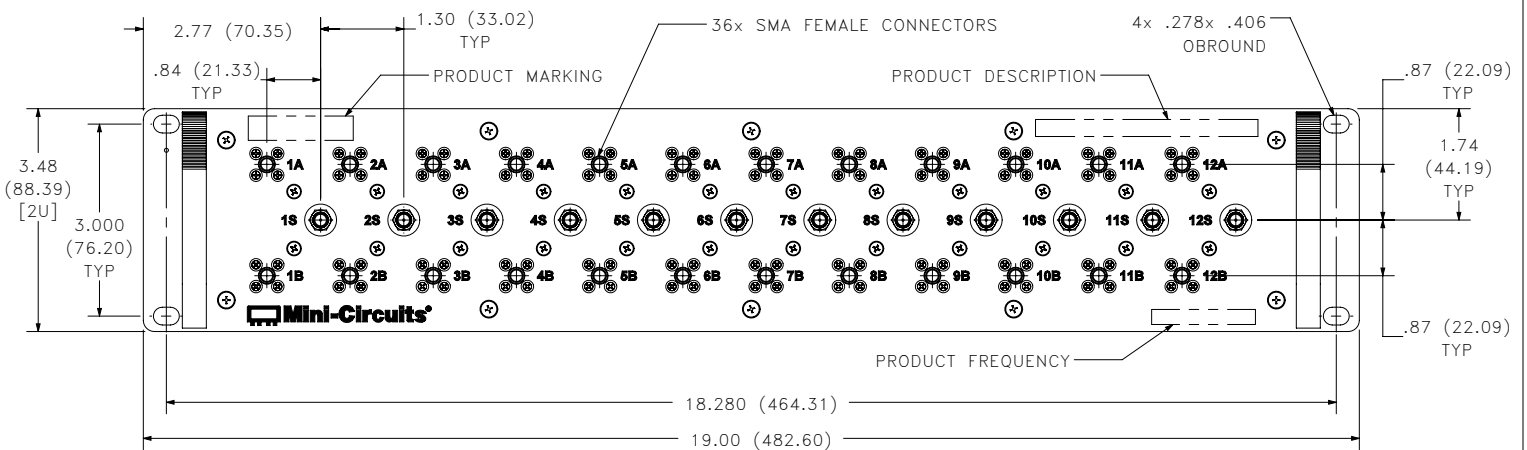
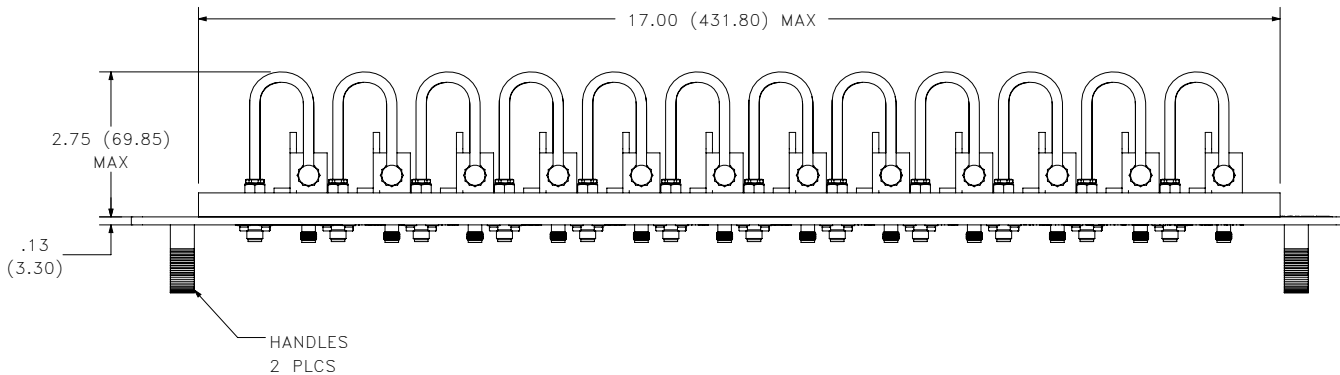
Included Accessories	Part Number	Description
	HT-4-SMA	SMA connector wrench (4" length)

- 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)





UNIT ID LABEL



**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: 1240 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