RACK-MOUNTED

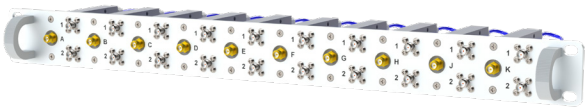
Splitter / Combiner Panel

ZT-401
ZT-401BK

50Ω 600 to 7400 MHz 10 x 2-Way SMA-Female

KEY FEATURES

- Rack-mounted RF splitter / combiner panel
- 10 x 2-way splitters in 1U rack space
- All connectors on the front panel
- Available with black or clear coated aluminum finish
- Wide bandwidth



ZT-401 – Clear coated aluminum

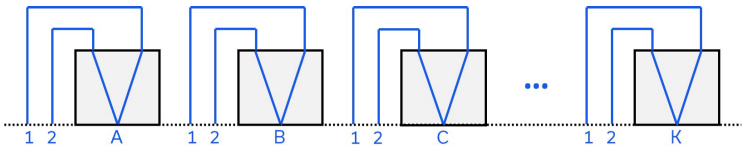
ZT-401BK – Black coated aluminum

Generic photo used for illustration purposes only

APPLICATIONS

- Production test setups
- Satcom signal distribution
- 5G FR1, Bluetooth & WiFi testing
- GNSS (GPS, Galileo, GLONASS) signal distribution

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-401 & ZT-401BK integrate 10 x 2-way splitter / combiners onto a compact rack-mounted panel requiring only 1U of rack space. Each splitter covers an exceptionally wide bandwidth of 600-7400 MHz with low insertion loss and high isolation between ports.

The panel is configured with all SMA RF connectors on the front for easy access within a rack-mounted test environment. ZT-401 is available with a clear coated aluminum finish and ZT-401BK is available with a black panel.

ELECTRICAL SPECIFICATIONS AT +25°C (EACH SPLITTER)

Parameter	Conditions	Min.	Typ.	Max.	Units
Frequency Range	-	600		7400	MHz
Insertion Loss[1]	30 – 4000 MHz 4000 – 7400 MHz		0.6 1.3	1.0 1.8	dB
Isolation	30 – 4000 MHz 4000 – 7400 MHz	15 18	18 21		dB
Return Loss	Sum ports Ports 1-2		14 18		dB
Input Power[2]	As a splitter			30	W

1. Above theoretical 3 dB loss
2. As a power splitter into load with 1.2:1 max VSWR

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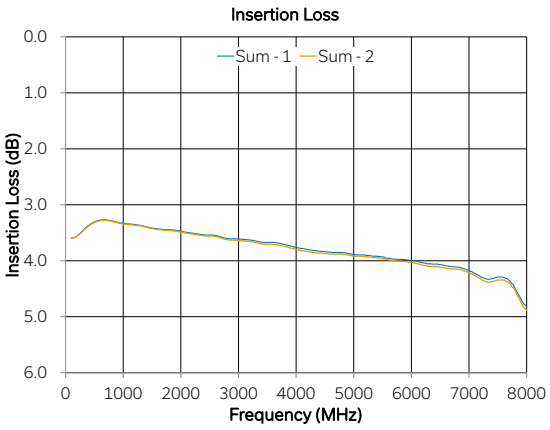
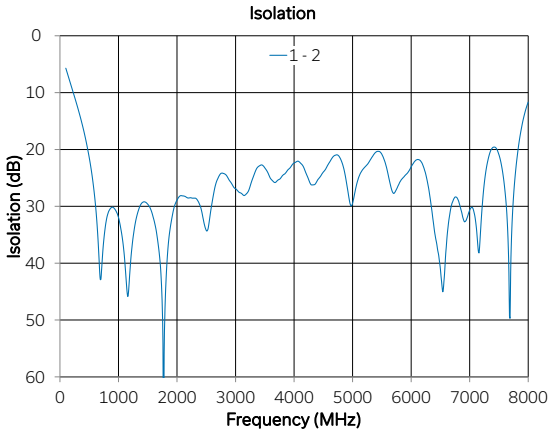
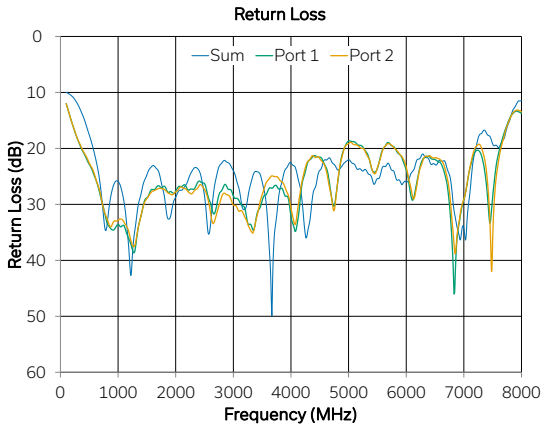
TYPICAL PERFORMANCE GRAPHS







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ABSOLUTE MAXIMUM RATINGS

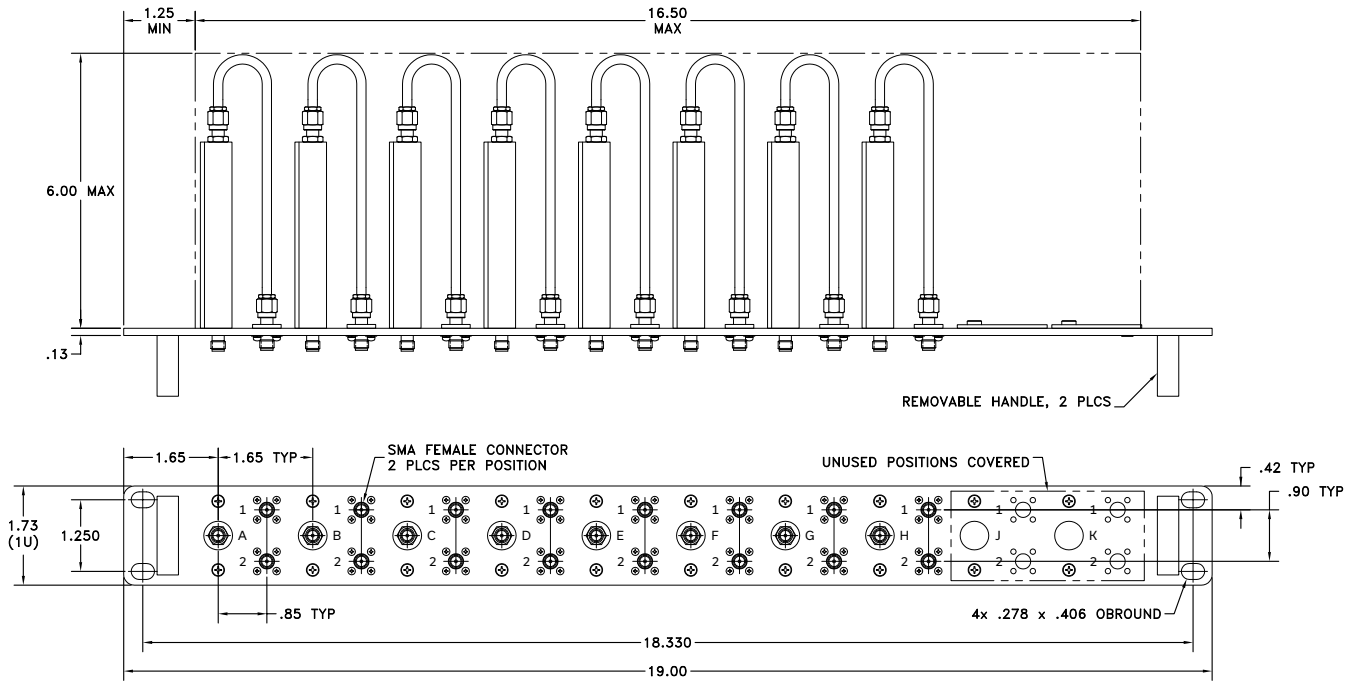
Parameter	Conditions	Limits	Units
Temperature	Operating	0 to +50	°C
	Storage	-20 to +60	

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-H	Sum port	SMA female
1-2 (each splitter)	Input / output port	SMA female

CASE STYLE DRAWING



Note: Generic drawing shown above. Positions A to K are populated for ZT-401 / ZT-401BK.

PRODUCT MARKING*

Product Marking: ZT-401
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	99-01-2947
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

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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