



Mini-Circuits®

RACK-MOUNTED | HIGH POWER

# 20-Way Power Splitter ZT-20HPS-63-S+

50Ω 2.5 to 6 GHz 100W

## THE BIG DEAL

- High input power rating
- Rack-mounted chassis
- Wide bandwidth
- Integrated cooling



Model Name	ZT-20HPS-63-S+
Case Style	YQ2594
Connectors	N-type female (In) SMA female (1-20)

## APPLICATIONS

- Benchtop and rack mounted automated test systems
- High power burn-in tests
- High temperature operating life test (HTOL)
- Active & passive component characterization

Refer to our website for compliance methodologies and qualifications



## PRODUCT OVERVIEW

ZT-20HPS-63+ is a passive RF power splitter enabling high power signal distribution in an RF test environment. The input power rating of 100 W allows the system designer to overcome the passive splitter losses in a multi-path distribution system and still deliver a test signal to 20 separate outputs at more than 2W per path. The specified operating bandwidth covers the key worldwide telecoms bands from 2.5 to 6 GHz. This splitter is ideal for use with Mini-Circuits' HPA-100W-63+ 100W high power amplifiers in HTOL test systems.

## ELECTRICAL SPECIFICATIONS @ 25°C<sup>1,2</sup>

Parameter	Condition	Min.	Typ.	Max.	Unit
Frequency Range		2.5		6	GHz
Insertion Loss			16.5	19.5	dB
Amplitude Unbalance			0.5		dB
Isolation	Between output ports	16	20		dB
Return Loss	In		15		dB
	1-20		18		
Input Power <sup>2</sup> As Splitter	2.5 – 3.6 GHz			100	W
	3.6 – 6 GHz			50	

<sup>1</sup> All output ports must be terminated in 50Ω when operating with input power greater than 10 W

<sup>2</sup> AC mains power supply must be connected and powered on by the front panel hardware switch whenever an RF input signal is present





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## ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Temperature	0°C to 50°C
Storage Temperature	-15°C to 85°C
Supply Voltage	260 Vac

## MECHANICAL SPECIFICATIONS

Dimensions	19" (W) x 2U (H) x 13" (D)			
Case Drawing	YQ2594			
Weight	6.4 kg			
Case Material	Aluminum (with protective coating to prevent corrosion)			
RF Connectors	Panel	Connector	Quantity	Port Labels
	Front	N-type female	1	In
		SMA female	20	1-20
	Front Panel	Rear Panel		
Panel Marking	<ul style="list-style-type: none"><li>• ZT-20HPS-63-S+</li><li>• 1x20 100W Power Splitter</li><li>• 2500-6000 MHz</li></ul>	<ul style="list-style-type: none"><li>• CE / UKCA</li><li>• Serial number / date code / model name</li></ul>		
Panel Items	<ul style="list-style-type: none"><li>• Power on / off switch with LED</li><li>• Carry handles</li></ul>	<ul style="list-style-type: none"><li>• AC mains power input (IEC C14 inlet)</li><li>• Cooling fan vent</li></ul>		
Power Supply	AC mains power input (90-260 V, 47-63 Hz)			
Fuse	2A, 250V rating			
Power Consumption	10W typ			
Temperature	Operating: 0 to +50 °C			





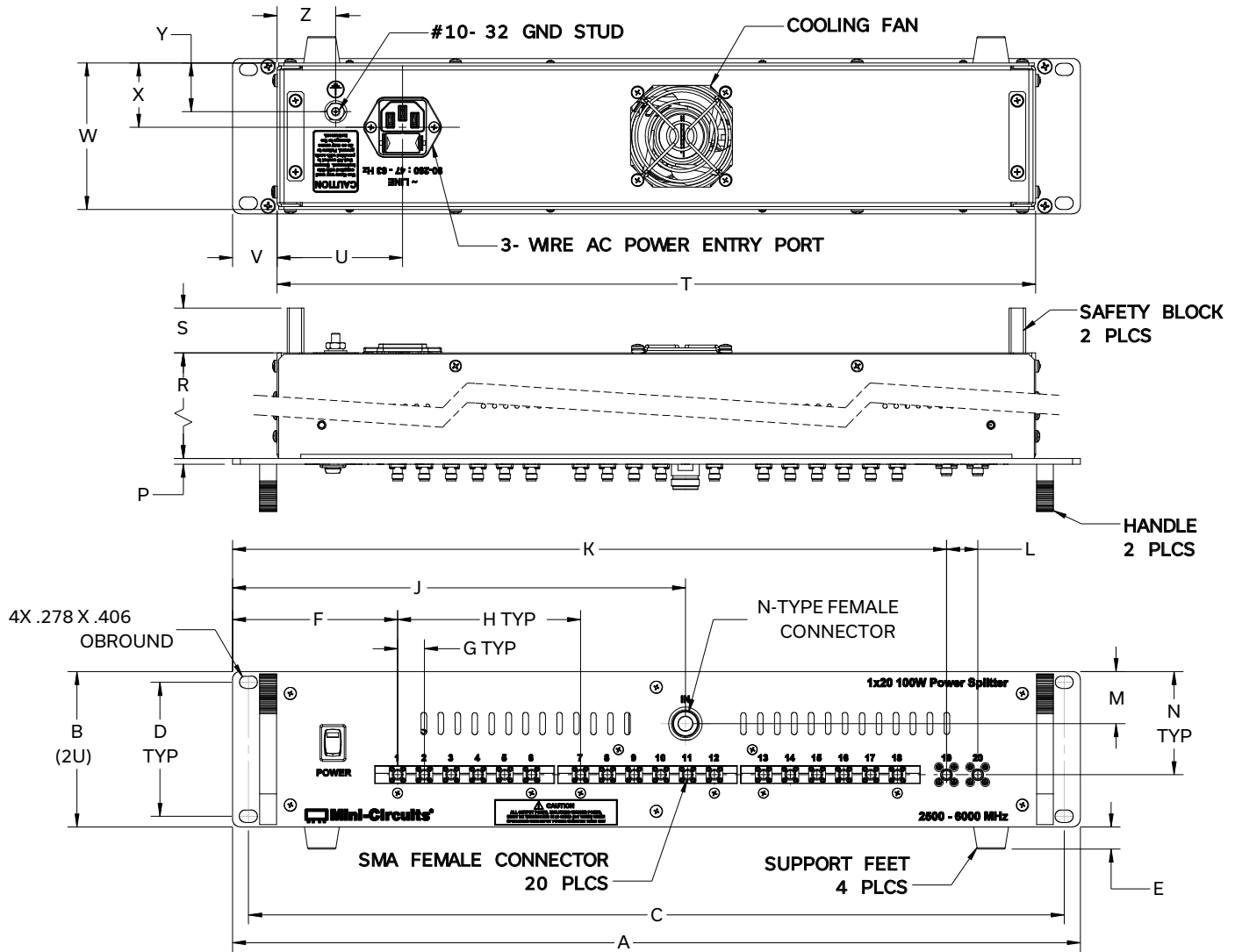
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## OUTLINE DRAWING



## OUTLINE DIMENSIONS (Inch mm)

CASE#	A	B	C	D	E	F	G	H	J	K	L	M	N	P
YQ2594	19.00 (482.6)	3.48 (88.4)	18.280 (464.31)	3.000 (76.20)	.49 (12.5)	3.70 (94.0)	.60 (15.2)	4.10 (104.1)	10.15 (257.8)	16.00 (406.4)	.70 (17.8)	1.17 (29.6)	2.31 (58.7)	.13 (3.2)
R	S	T	U	V	W	X	Y	Z	WT. GRAMS					
13.00 (330.2)	1.00 (25.4)	17.00 (431.8)	2.81 (71.4)	1.00 (25.4)	3.28 (83.4)	1.44 (36.6)	1.09 (27.7)	1.31 (33.3)	6360					

Dimensions are in inches (mm). Tolerances: 2 Pl.  $\pm .03$ ; 3 Pl.  $\pm .015$





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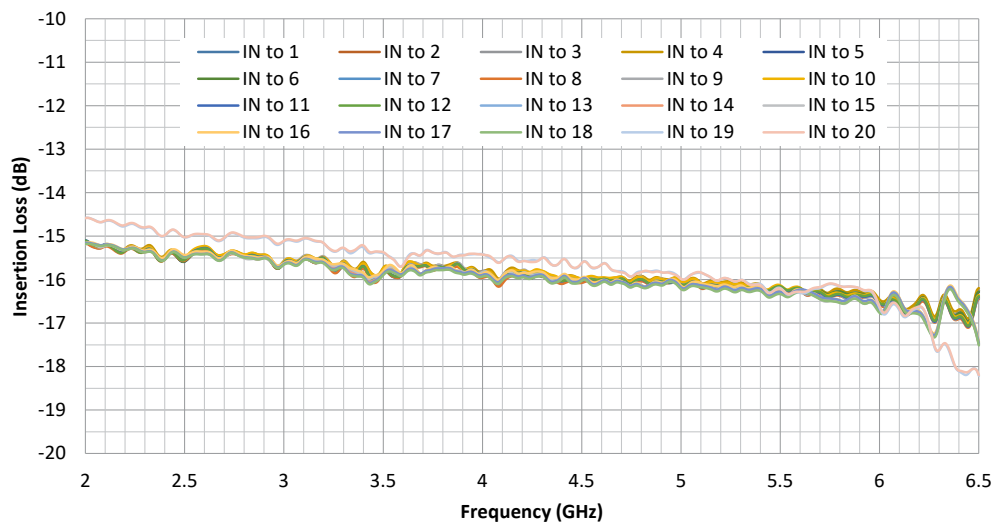
# 20-Way Power Splitter ZT-20HPS-63-S+

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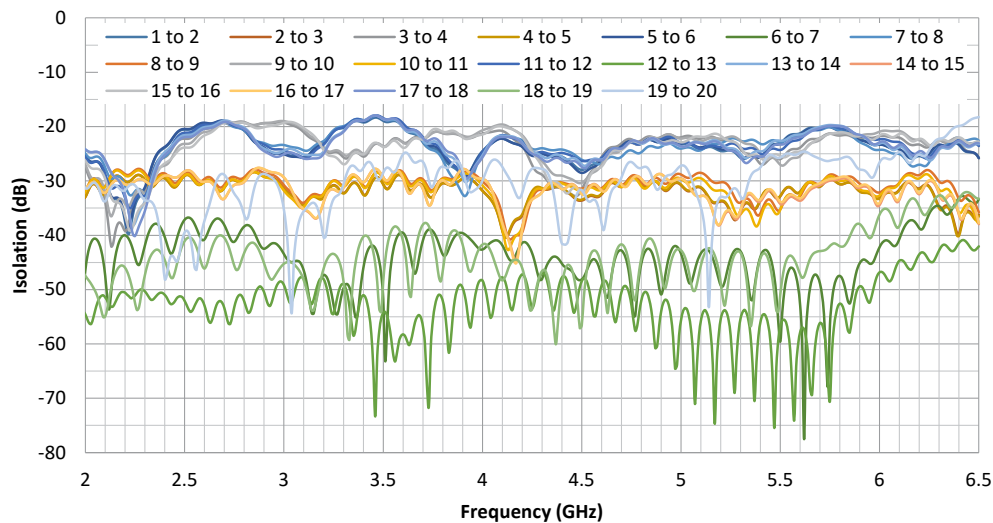
50Ω 2.5 to 6 GHz 100W

## TYPICAL PERFORMANCE CURVES

Insertion Loss



Isolation (Adjacent Ports)



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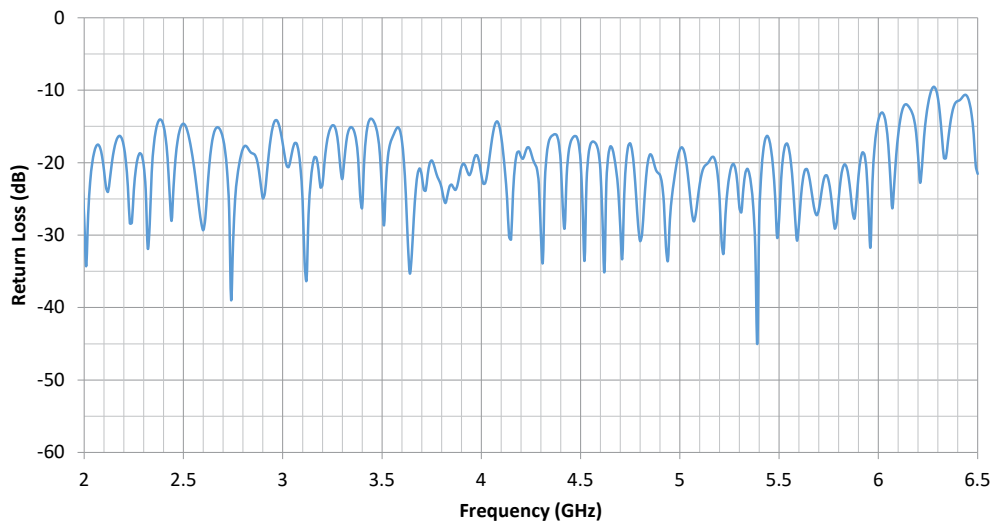
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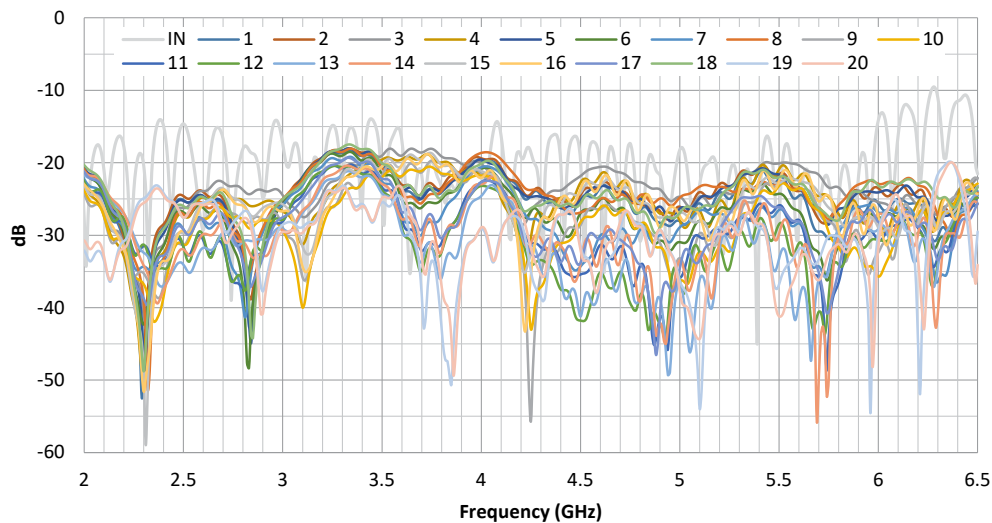
50 $\Omega$  2.5 to 6 GHz 100W

## TYPICAL PERFORMANCE DATA

Input Return Loss



Output Return Loss





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50Ω 2.5 to 6 GHz 100W

## ORDERING INFORMATION

Please contact Mini-Circuits' Test Solutions department for price and availability: [testsolutions@minicircuits.com](mailto:testsolutions@minicircuits.com)

## INCLUDED ACCESSORIES

Model Name	Quantity	Description
CBL-3W-xx*	1	AC power cord (IEC C13 connector to local plug)
HT-4-SMA	1	SMA Cable Wrench (4 in)

\*Please specify one option on the purchase order, at no charge

Cable Model	Region
CBL-3W-US	USA
CBL-3W-EU	Europe
CBL-3W-IL	Israel
CBL-3W-UK	UK
CBL-3W-AU	Australia / China

## NOTES

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- 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)





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## RF/IF MICROWAVE COMPONENTS



## Environmental Specifications ENV56

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 40° C Ambient Environment	Individual Model Data Sheet
Storage Temperature	-15° to 85° 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