



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) |

Refer to our website for compliance methodologies and qualifications



APPLICATIONS

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

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^{1,2}

| 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 ² As Splitter | 2.5 – 3.6 GHz | | | 100 | W |
| | 3.6 – 6 GHz | | | 50 | |

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

² 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">• ZT-20HPS-63-S+• 1x20 100W Power Splitter• 2500-6000 MHz | <ul style="list-style-type: none">• CE / UKCA• Serial number / date code / model name | | |
| Panel Items | <ul style="list-style-type: none">• Power on / off switch with LED• Carry handles | <ul style="list-style-type: none">• AC mains power input (IEC C14 inlet)• Cooling fan vent | | |
| 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 | | | |



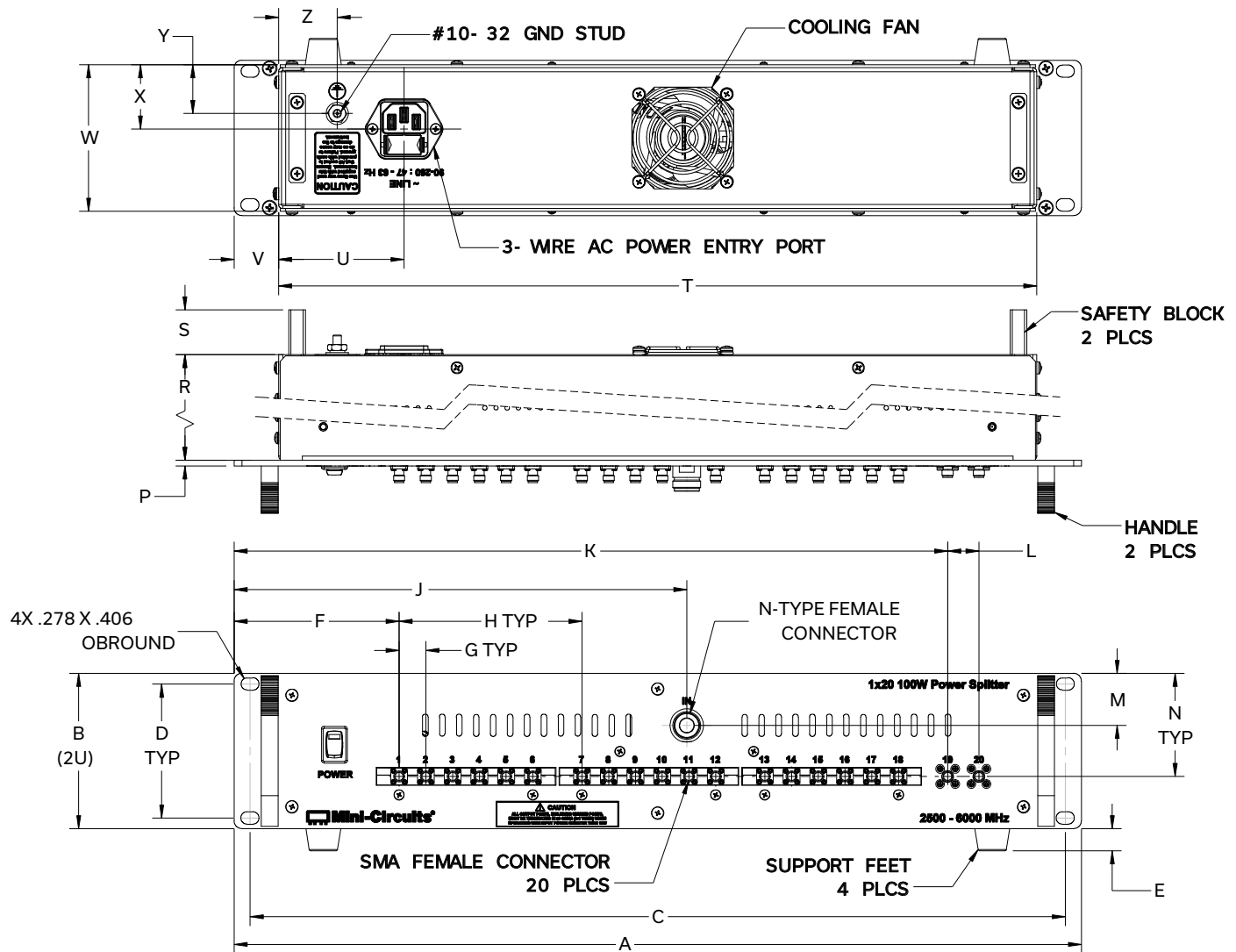
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OUTLINE DRAWING



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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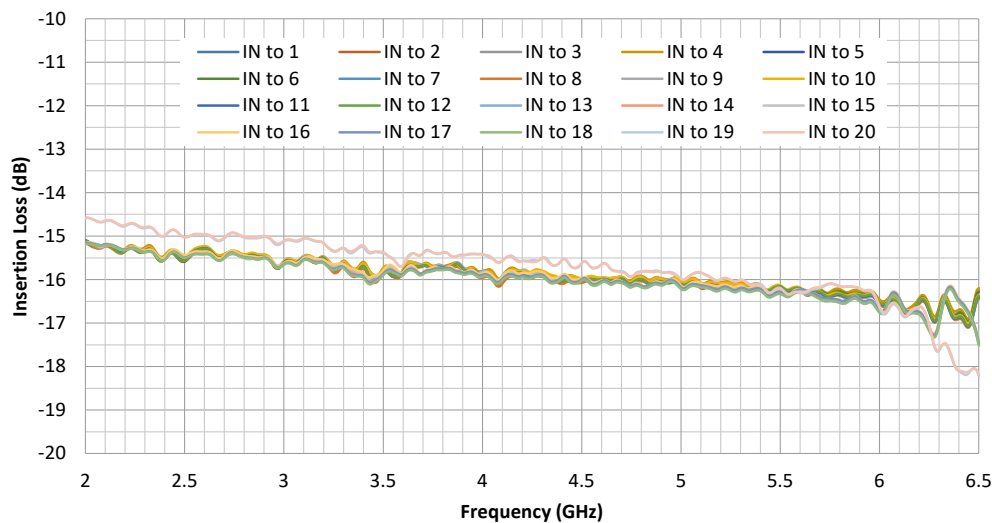
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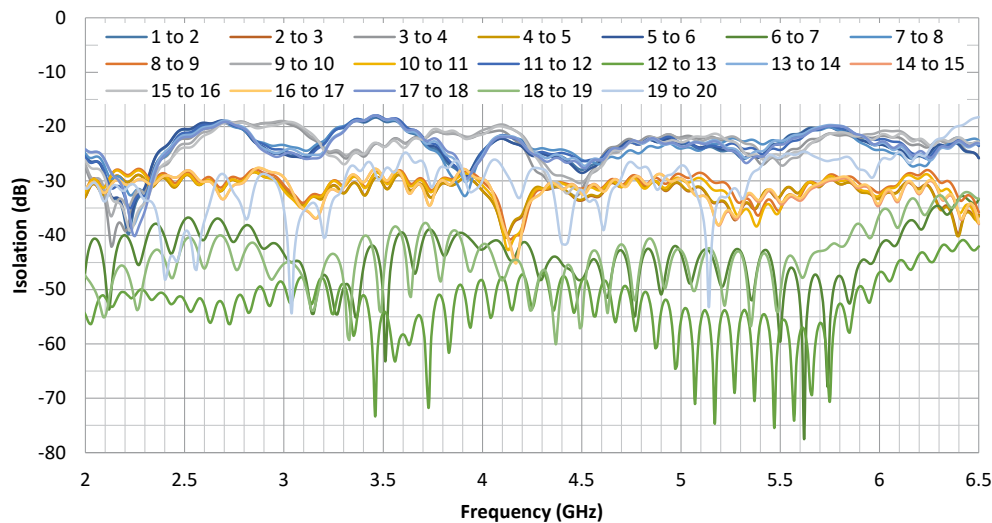
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TYPICAL PERFORMANCE CURVES

Insertion Loss



Isolation (Adjacent Ports)





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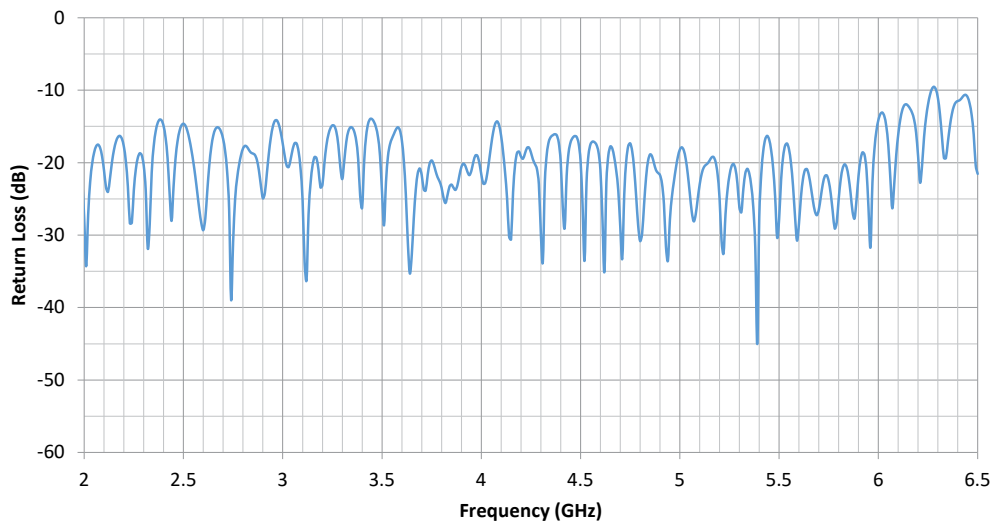
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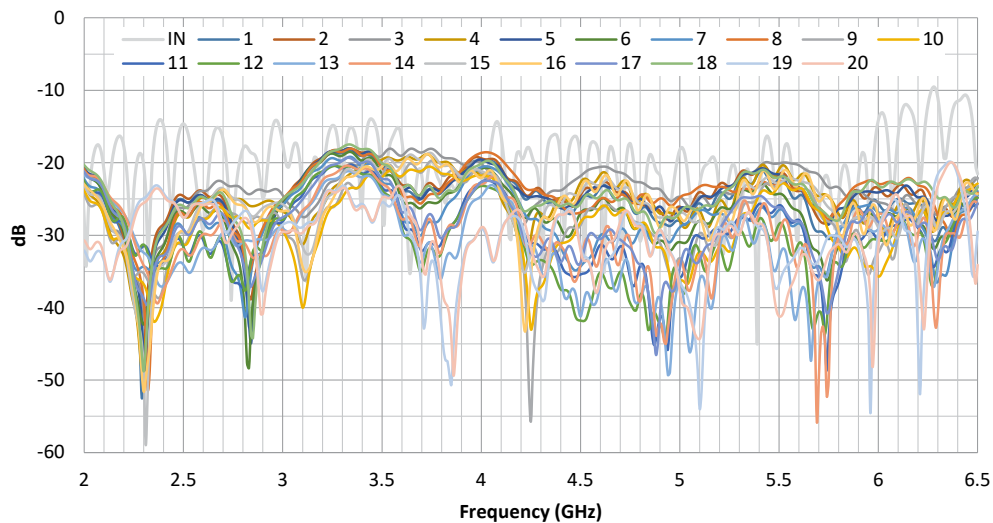
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TYPICAL PERFORMANCE DATA

Input Return Loss



Output Return Loss





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ORDERING INFORMATION

Please contact Mini-Circuits' Test Solutions department for price and availability: 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





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: 6360 grams.
4. Marking may contain other features or characters for internal lot control.



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 |