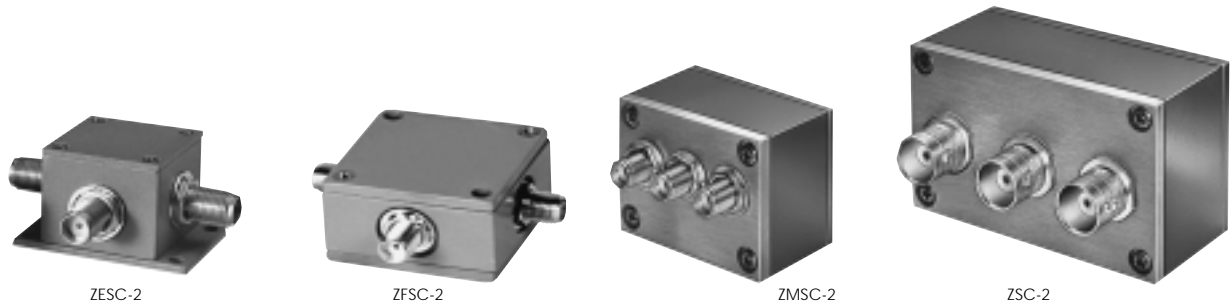


POWER SPLITTERS/COMBINERS

50 & 75Ω

2 WAY-0° 2 kHz to 10 GHz



| MODEL NO. | FREQ. RANGE MHz f_l-f_u | ISOLATION dB | | | | | | INSERTION LOSS, dB Above 3dB | | | | | | PHASE UNBAL. Degrees | | | AMPLITUDE UNBAL. dB | | | VSWR (:1) | | CASE STYLE Note B | CONNECTOR | PRICE \$ ea. Qty. (1-9) |
|----------------|------------------------------|--------------|----|----|----|----|----|------------------------------|------|------|------|------|-----|----------------------|-----|---|---------------------|------|------|--------------|--|----------------------|-----------|-------------------------|
| | | L | M* | U | L | M* | U | L | M* | U | L | M* | U | S | OUT | S | OUT | | | | | | | |
| ZESC-2-11 | 10-2000 | 19 | 10 | 18 | 13 | 20 | 11 | 0.5 | 0.9 | 0.5 | 1.0 | 0.6 | 1.2 | 1 | 3 | 6 | 0.20 | 0.30 | 0.50 | | | V37 | ar | 71.95 |
| ZFSC-2-1 | 5-500 | 30 | 25 | 28 | 20 | 25 | 20 | 0.2 | 0.5 | 0.3 | 0.6 | 0.6 | 0.8 | 2 | 4 | 4 | 0.15 | 0.15 | 0.30 | | | K18 | ar | 44.95 |
| ■ ZFSC-2-1-75 | 0.25-300 | 20 | 15 | 30 | 25 | 25 | 20 | 0.4 | 0.75 | 0.4 | 0.75 | 0.4 | 1.0 | 2 | 3 | 5 | 0.15 | 0.20 | 0.30 | | | K18 | ar | 45.95 |
| ■ ZFSC-2-1W-75 | 5-600 | 44 | 26 | 45 | 30 | 31 | 20 | 0.22 | 0.6 | 0.27 | 0.7 | 0.46 | 0.9 | 1 | 2 | 3 | 0.20 | 0.30 | 0.40 | | | K18 | ar | 50.95 |
| ZFSC-2-1W | 1-750 | 30 | 20 | 28 | 20 | 25 | 20 | 0.2 | 0.5 | 0.4 | 0.8 | 0.8 | 1.0 | 2 | 4 | 4 | 0.15 | 0.15 | 0.30 | | | K18 | ar | 48.95 |
| ZFSC-2-2 | 10-1000 | 30 | 20 | 25 | 20 | 23 | 18 | 0.2 | 0.5 | 0.5 | 1.0 | 0.9 | 1.2 | 2 | 4 | 4 | 0.15 | 0.15 | 0.30 | | | K18 | ar | 51.95 |
| ZFSC-2-9G | 3500-9000 | 18 | 12 | 20 | 12 | | | 0.5 | 1.5 | 0.6 | 1.2 | | | 7 | 10 | | 0.30 | 0.50 | | | | JJJ142 | as | 59.95 |
| ZFSC-2-10G | 2000-10000 | 15 | 9 | 20 | 12 | | | 0.5 | 1.5 | 0.6 | 1.6 | | | 7 | 12 | | 0.60 | 0.50 | | | | JJJ142 | as | 69.95 |
| ZFSC-2-4 | 0.2-1000 | 20 | 15 | 25 | 20 | 23 | 18 | 0.2 | 0.8 | 0.5 | 1.0 | 0.9 | 1.2 | 2 | 4 | 4 | 0.15 | 0.15 | 0.30 | see Yoni for | | K18 | ar | 55.95 |
| ZFSC-2-5 | 10-1500 | 25 | 15 | 30 | 20 | 25 | 18 | 0.25 | 0.6 | 0.5 | 1.0 | 0.8 | 1.5 | 2 | 3 | 4 | 0.15 | 0.20 | 0.50 | | | K18 | ar | 59.95 |
| ⊕ ZFSC-2-6* | 0.002-60 | 27 | 20 | 30 | 20 | 27 | 20 | 0.3 | 0.6 | 0.3 | 0.6 | 0.6 | 1.0 | 2 | 3 | 4 | 0.15 | 0.20 | 0.30 | Performance | | K18 | ar | 49.95 |
| ⊕ ZFSC-2-6-75 | 0.004-60 | 30 | 20 | 35 | 20 | 25 | 20 | 0.5 | 0.8 | 0.4 | 0.8 | 0.7 | 1.0 | 1 | 2 | 3 | 0.15 | 0.20 | 0.30 | | | K18 | ar | 51.95 |
| ZFSC-2-11 | 10-2000 | 14 | 10 | 16 | 14 | 20 | 15 | 1.2 | 1.5 | 1.2 | 1.5 | 1.0 | 2.2 | 1 | 2 | 4 | 0.20 | 0.30 | 0.50 | Data and | | K18 | ar | 64.95 |
| ▲ ZFSC-2-2500 | 10-2500 | 16 | 11 | 17 | 14 | 17 | 14 | 0.5 | 0.8 | 0.6 | 1.4 | 0.8 | 1.5 | 1 | 4 | 8 | 0.20 | 0.30 | 0.40 | curves | | K18 | ar | 74.95 |
| ⊕ ZMSC-2-1 | 0.1-400 | 20 | 15 | 25 | 20 | 25 | 20 | 0.2 | 0.5 | 0.4 | 0.75 | 0.6 | 1.0 | 2 | 3 | 4 | 0.15 | 0.20 | 0.30 | | | M21 | at | 49.95 |
| ZMSC-2-1W | 1-650 | 25 | 20 | 35 | 20 | 25 | 20 | 0.3 | 0.5 | 0.5 | 0.8 | 0.7 | 1.0 | 2 | 3 | 4 | 0.15 | 0.20 | 0.30 | | | M21 | at | 54.95 |
| ⊕ ZMSC-2-2* | 0.002-60 | 27 | 20 | 30 | 20 | 27 | 20 | 0.3 | 0.6 | 0.3 | 0.6 | 0.6 | 1.0 | 2 | 3 | 4 | 0.15 | 0.25 | 0.30 | | | M21 | at | 59.95 |
| ZSC-2-1 | 0.1-400 | 20 | 15 | 25 | 20 | 25 | 20 | 0.2 | 0.5 | 0.4 | 0.75 | 0.6 | 1.0 | 2 | 3 | 4 | 0.15 | 0.20 | 0.30 | | | M22 | at | 47.95 |
| ZSC-2-1W | 1-650 | 25 | 20 | 35 | 25 | 25 | 20 | 0.3 | 0.5 | 0.5 | 0.8 | 0.7 | 1.0 | 2 | 3 | 4 | 0.15 | 0.20 | 0.30 | | | M22 | at | 49.95 |
| ⊕ ZSC-2-2* | 0.002-60 | 25 | 20 | 30 | 20 | 27 | 20 | 0.3 | 0.6 | 0.3 | 0.6 | 0.6 | 1.0 | 2 | 3 | 4 | 0.15 | 0.25 | 0.30 | | | M22 | at | 52.95 |
| ⊕ ZSC-2-2-75** | 0.002-60 | 25 | 20 | 30 | 20 | 27 | 20 | 0.3 | 0.6 | 0.3 | 0.6 | 0.6 | 1.0 | 2 | 3 | 4 | 0.15 | 0.25 | 0.30 | | | M22 | at | 53.95 |
| ZSC-2-4 | 10-1000 | 25 | 20 | 35 | 20 | 25 | 20 | 0.2 | 0.5 | 0.5 | 0.8 | 0.7 | 1.3 | 2 | 4 | 6 | 0.15 | 0.20 | 0.30 | | | M22 | at | 52.95 |
| ■ ZSC-2375 | 55-85 | | | 35 | 25 | | | | | 0.3 | 0.5 | | | | | 1 | | 0.10 | | | | M22 | at | 52.95 |
| ■ ZSC-2-1-75 | 0.25-300 | 20 | 15 | 30 | 20 | 20 | 15 | 0.4 | 0.75 | 0.4 | 0.75 | 0.4 | 1.0 | 2 | 3 | 5 | 0.15 | 0.20 | 0.30 | | | M22 | at | 49.95 |

NOTES:

- * Isolation specified to 0.006 MHz
- ** Insertion loss, specified to -20°C from 0.002 to 0.004 MHz. From 2 to 6 KHz, isolation 14 dB min.
- ⊕ When only specification for M range given, specification applies to entire frequency range.
- ⊕ At low range frequency band (f_l to $10 f_l$), linearly derate maximum input power by 13 dB.
- Denotes 75 Ohm model, for coax connector models 75 Ohm BNC connectors are standard.
- ▲ Available only with SMA connectors
- ▼ Available with SMA or N connectors, ZAPD-50 & -50W with N only.
- A. General Quality Control Procedures, Environmental Specifications, Hi-Rel and MIL description are given in "Mini-Circuits Guarantees Quality" article.
- B. For details on Connector types, case mounted options, case finishes see "Case styles & Outline Drawings".
- C. Prices and specifications subject to change without notice.
- 1. Absolute maximum power, voltage and current ratings:
 - 1a. Matched power rating:
 - Models ZAPD, ZN2PD, ZC2PD, ZN2PD2 10 Watt
 - ZAPD-900-5W, ZN2PD-20 5W (as a splitter)
 - ZAPD-30 and other models 1 Watt
 - 1b. Internal load dissipation:
 - ZAPD-900-5W 1W max.
 - ZN2PD-20 0.725W max.
 - ZN2PD-9G, ZAPD-2-22-75, ZN2PD2 0.25W max.
 - All other models 0.125 Watt

coaxial connections

see case style outline drawing for pin locations

| PORT | ar | as | at |
|----------|----|----|----|
| SUM PORT | 3 | 5 | 2 |
| PORT 1 | 1 | 1 | 1 |
| PORT 2 | 2 | 2 | 3 |
| GND EXT. | — | — | — |
| CASE GND | — | — | — |
| NOT USED | — | — | — |



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Coaxial



| MODEL NO. | FREQ. RANGE MHz f_L - f_U | ISOLATION dB | | | INSERTION LOSS, dB Above 3dB | | | PHASE UNBAL. Degrees | | | AMPLITUDE UNBAL. dB | | | VSWR (:1) | | CASE STYLE Note B | CONNECTION | PRICE \$ ea. Qty. (1-9) | | | | | | | | | |
|----------------------|----------------------------------|----------------------|-----------------------------|----------------|------------------------------|-----------------------------|----------------|----------------------|------------------------|-----------|---------------------|------------------------|-----------|----------------|------------------|----------------------|------------|-------------------------|------|------|------|------|------|--|-----|----|-------|
| | | L Typ. Min. | M ^o Typ. Min. | U Typ. Min. | L Typ. Max. | M ^o Typ. Max. | U Typ. Max. | L Max. | M ^o Max. | U Max. | L Max. | M ^o Max. | U Max. | S Typ. Max. | OUT Typ. Max. | | | | | | | | | | | | |
| ZC2PD-900 | 800-900 | | 30 | 20 | | 0.1 | 0.4 | | 2 | | 0.20 | 1.10 | 1.30 | 1.10 | 1.30 | F183 | as | 64.95 | | | | | | | | | |
| ZN2PD-20 | 750-2000 | L ^o 18 | 15 | 25 | 20 | 18 | 15 | | 2 | | 0.30 | 1.16 | 1.5 | 1.10 | 1.35 | VVV180 | as | 67.95 | | | | | | | | | |
| ZN2PD-920 | 800-920 | | 30 | 20 | | 0.15 | 0.4 | | 2 | | 0.20 | 1.10 | 1.20 | 1.04 | 1.20 | VVV180 | as | 59.95 | | | | | | | | | |
| ZN2PD-920W | 700-1050 | | 22 | 15 | | 0.15 | 0.5 | | 3 | | 0.30 | 1.20 | 1.50 | 1.04 | 1.20 | VVV180 | as | 54.95 | | | | | | | | | |
| ZN2PD-1900 | 1600-1900 | | 30 | 20 | | 0.18 | 0.4 | | 2 | | 0.20 | 1.20 | 1.35 | 1.04 | 1.20 | VVV180 | as | 69.95 | | | | | | | | | |
| ZN2PD-1900W | 1500-2000 | | 24 | 15 | | 0.2 | 0.5 | | 3 | | 0.30 | 1.20 | 1.50 | 1.04 | 1.20 | VVV180 | as | 64.95 | | | | | | | | | |
| ZN2PD-9G | 1700-9000 | | 22 | 15 | | 0.5 | 1.4 | | 4 | | 0.60 | | | | | VVV180 | as | 69.95 | | | | | | | | | |
| NEW ZN2PD2-50 | 500-5000 | | 25 | 15 | | 0.8 | 1.4 | | 4 | | 0.5 | 1.20 | — | 1.10 | — | VVV845 | as | 74.95 | | | | | | | | | |
| | 600-1600 | | 24 | 17 | | 0.7 | 1.1 | | 2 | | 0.3 | 1.20 | — | 1.10 | — | | | | | | | | | | | | |
| | 1600-2700 | | 26 | 18 | | 0.8 | 1.2 | | 3 | | 0.3 | 1.20 | — | 1.10 | — | | | | | | | | | | | | |
| | 2700-3600 | | 28 | 19 | | 0.9 | 1.3 | | 3 | | 0.4 | 1.20 | — | 1.10 | — | | | | | | | | | | | | |
| | 3700-4800 | | 22 | 18 | | 0.9 | 1.4 | | 4 | | 0.5 | 1.20 | — | 1.10 | — | | | | | | | | | | | | |
| | GHz | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IZY2PD-64 | 5.8-6.4 | | 35 | 24 | | 0.2 | 0.5 | | 5 | | 0.30 | 1.05 | 1.30 | 1.20 | 1.35 | JJJ245 | as | 89.95 | | | | | | | | | |
| IZY2PD-86 | 7.0-8.6 | | 30 | 18 | | 0.1 | 0.5 | | 6 | | 0.25 | 1.10 | 1.45 | 1.10 | 1.40 | JJJ245 | as | 94.95 | | | | | | | | | |
| ZAPD-1 | 0.5-1.0 | | 25 | 19 | | 0.25 | 0.6 | | 2 | | 0.20 | | | | | F14 | as | 54.95 | | | | | | | | | |
| ZAPD-2 | 1.0-2.0 | | 25 | 19 | | 0.25 | 0.6 | | 2 | | 0.20 | | | | | F14 | as | 54.95 | | | | | | | | | |
| ■ ZAPD-2-22-75 | 0.91-2.15 | | 30 | 20 | | 0.2 | 0.7 | | 2 | | 0.40 | 1.15 | 1.60 | 1.10 | 1.30 | F14 | as | 58.95 | | | | | | | | | |
| ▼ ZAPD-20 | 0.7-2.0 | | 30 | 20 | | 0.30 | 0.7 | | 3 | | 0.40 | 1.15 | 1.35 | 1.10 | 1.30 | F53 | as | 59.95 | | | | | | | | | |
| ZAPD-21 | 0.5-2.0 | | 25 | 18 | | 0.25 | 1.0 | | 3 | | 0.20 | | | | | F53 | as | 59.95 | | | | | | | | | |
| ▲ ZAPD-30 | 0.02-3.0 | 14 | 12 | 16 | 12 | 20 | 14 | 1.1 | 1.5 | 1.1 | 1.8 | 1.4 | 2.3 | 3 | 5 | 9 | 0.30 | 0.40 | 0.80 | 1.50 | 1.95 | 1.55 | 2.10 | see Yoni for Performance Data and curves | F14 | as | 79.95 |
| ▼ ZAPD-4 | 2.0-4.2 | | 25 | 19 | | 0.4 | 0.8 | | 6 | | 0.40 | | | | | F14 | as | 59.95 | | | | | | | | | |
| ▼ ZAPD-50 | 4.4-5.0 | | 26 | 20 | | 0.3 | 0.8 | | 5 | | 0.50 | | | | | F14 | as | 54.95 | | | | | | | | | |
| ▼ ZAPD-50W | 4.2-6.0 | | 26 | 16 | | 0.3 | 0.8 | | 5 | | 0.70 | | | | | F14 | as | 64.95 | | | | | | | | | |
| ▼ ZAPD-900-5W | 0.1-0.9 | | 23 | 18 | | 0.3 | 1.0 | | 3 | | 0.30 | 1.15 | 1.50 | 1.22 | 1.50 | F14 | as | 59.95 | | | | | | | | | |
| ▼ ZAPD-1750 | 0.95-1.75 | | 30 | 22 | | 0.2 | 0.4 | | 4 | | 0.50 | 1.15 | 1.50 | 1.22 | 1.50 | F14 | as | 54.95 | | | | | | | | | |

L = low range [f_L to $10 f_L$]
 L¹ = f_L to 6 GHz
 L⁰ = 750 to 875 MHz

M = mid range [$10 f_L$ to $f_U/2$]
 U¹ = 6 GHz to f_U
 U⁰ = 1850 to 2000 MHz

U = upper range [$f_U/2$ to f_U]

NSN GUIDE

| MCL NO. | NSN | MCL NO. | NSN | MCL NO. | NSN |
|----------------|------------------|----------------|------------------|---------------|------------------|
| ZAPD-1(TNC) | 5985-01-250-4883 | ZFSC-2-2(SMA) | 6625-01-333-1127 | ZN2PD-920W-S | 5895-01-522-3794 |
| ZAPD-2(BNC) | 5895-01-476-0831 | ZFSC-2-2B | 5895-01-330-4416 | ZSC-2-1-75BR | 5985-01-476-2126 |
| ZAPD-2(SMA) | 5895-01-229-7431 | ZFSC-2-4 | 6625-01-291-3346 | ZSC-2-1 | 5895-01-214-6032 |
| ZAPD-2(N) | 5985-01-449-0825 | ZFSC-2-4B | 5895-01-446-1158 | ZSC-2-1B | 6625-01-109-3706 |
| ZAPD-4(N) | 6625-01-173-1887 | ZFSC-2-5 | 6625-01-253-2444 | ZSC-2-1(BNC) | 5895-01-036-6254 |
| ZAPD-4(SMA) | 5985-01-383-0636 | ZFSC-2-6 | 6625-01-419-4241 | ZSC-2-1B(BNC) | 6625-00-270-3055 |
| ZAPD-900-5W-N | 5985-01-523-2508 | ZFSC-2-6(BNC) | 5895-01-408-6857 | ZSC-2-1W | 5895-01-283-0850 |
| ZESC-2-11 | 5985-01-381-9081 | ZFSC-2-6B | 5985-01-315-2869 | ZSC-2-1WB | 6625-01-264-8985 |
| ZFSC-2-1 | 6625-01-139-3499 | ZFSC-2-9G | 5895-01-524-8996 | ZSC-2-1-75B | 5895-01-136-8182 |
| ZFSC-2-1(SMA) | 6625-01-213-6490 | ZFSC-2-10G | 5895-01-467-5372 | ZSC-2-2B | 5820-01-136-7245 |
| ZFSC-2-1(BNC) | 5985-01-176-4551 | ZFSC-2-11(SMA) | 6625-01-415-2183 | ZSC-2-2-75B | 5915-01-012-8162 |
| ZFSC-2-1-75 | 5895-01-325-4795 | ZFSC-2-2500B | 5895-01-516-3575 | ZSC-2375 | 5895-01-229-0157 |
| ZFSC-2-1W(SMA) | 6625-01-200-5094 | ZMSC-2-1 | 5985-01-204-1526 | ZSC-2-4 | 5895-01-523-0183 |
| ZFSC-2-1W | 5895-01-348-3534 | ZMSC-2-1B | 5895-01-253-2445 | ZSC-2-4B | 5895-01-467-5362 |
| ZFSC-2-2B(SMA) | 6625-01-362-1801 | ZMSC-2-1BR | 5985-01-338-9329 | | |
| ZFSC-2-2 | 5895-01-467-5374 | ZMSC-2-1W | 5895-01-127-0232 | | |



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