

# Power Splitters/Combiners

## ZX10-SERIES

### 2 Way-0°, 50Ω 2 to 12600 MHz



CASE STYLE: FL905

#### Features

- low insertion loss, 0.25 dB typ.
- excellent amplitude unbalance
- very good phase unbalance
- small size
- low cost
- patent pending

#### Applications

- communications
- defense
- cable tv relay
- radio
- cellular/GSM
- UHF/VHF receivers/transmitters

- PCN/PCS
- VSAT
- DECT
- PHS

#### Electrical Specifications ( $T_{AMB}=25^{\circ}\text{C}$ )

| MODEL NO.  | FREQ. RANGE (MHz) | ISOLATION (dB) | INSERTION LOSS (dB) above 3.0 dB | PHASE UNBALANCE (Deg.) | AMPLITUDE UNBALANCE (dB) | CASE STYLE | CONNECTION | PRICE \$    |
|------------|-------------------|----------------|----------------------------------|------------------------|--------------------------|------------|------------|-------------|
|            | $f_L-f_U$         | Typ. Min.      | Typ. Max.                        | Max.                   | Max.                     |            |            | Qty. (1-24) |
| ZX10-2-12  | 2-1200            | 21 16          | 0.5 1.5                          | 3.0                    | 0.5                      | FL905      | ar         | 24.95       |
|            | 2-20              | 29 21          | 0.3 0.7                          | 3.0                    | 0.5                      |            |            |             |
|            | 20-600            | 25 18          | 0.3 0.8                          | 2.0                    | 0.4                      |            |            |             |
|            | 600-1000          | 21 18          | 0.5 1.0                          | 2.0                    | 0.5                      |            |            |             |
| ZX10-2-20  | 200-2000          | 20 16          | 0.8 2.2                          | 6.0                    | 0.4                      | FL905      | ar         | 24.95       |
|            | 800-1000          | 22 17          | 0.5 0.9                          | 2.0                    | 0.3                      |            |            |             |
|            | 500-1500          | 22 17          | 0.5 1.3                          | 3.0                    | 0.4                      |            |            |             |
|            | 1800-2000         | 20 17          | 1.6 2.2                          | 6.0                    | 0.4                      |            |            |             |
| ZX10-2-25  | 1000-2500         | 20 14          | 1.2 2.2                          | 10.0                   | 1.2                      | FL905      | ar         | 26.95       |
|            | 1400-1800         | 18 16          | 0.9 1.4                          | 6.0                    | 0.6                      |            |            |             |
|            | 1800-2000         | 19 16          | 0.9 1.4                          | 6.0                    | 0.6                      |            |            |             |
| ZX10-2-42  | 1900-4200         | 23 10          | 0.2 1.0                          | 3.0                    | 0.3                      | FL905      | ar         | 34.95       |
|            | 2600-3400         | 23 17          | 0.2 0.5                          | 2.0                    | 0.3                      |            |            |             |
| ZX10-2-71  | 2950-7100         | 23 10          | 0.25 0.9                         | 3.0                    | 0.4                      | FL905      | ar         | 34.95       |
|            | 4500-5700         | 23 18          | 0.2 0.4                          | 3.0                    | 0.3                      |            |            |             |
| ZX10-2-98  | 4750-9800         | 23 10          | 0.3 1.2                          | 9.0                    | 0.5                      | FL905      | ar         | 39.95       |
|            | 7000-9000         | 23 18          | 0.3 0.8                          | 8.0                    | 0.4                      |            |            |             |
| ZX10-2-126 | 7400-12600        | 23 10          | 0.3 1.3                          | 10.0                   | 0.5                      | FL905      | ar         | 39.95       |
|            | 9000-11000        | 23 16          | 0.3 0.6                          | 5.0                    | 0.3                      |            |            |             |

#### Maximum Ratings

Operating Temperature -40°C to 85°C

Storage Temperature -55°C to 100°C

Power Input (as a splitter) 1.0\*W max.

Power Input (as a combiner) 0.125\*\*W max.

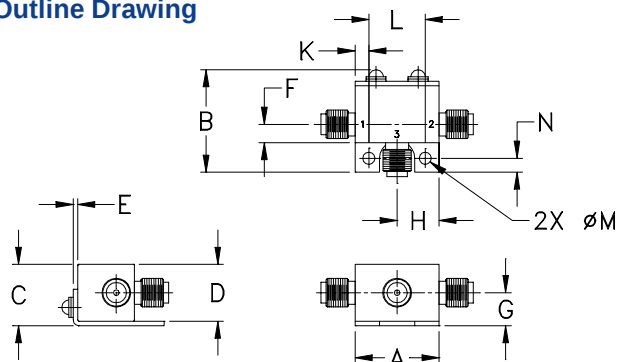
\*0.5W max. for ZX10-2-12, ZX10-2-20

\*\*0.1W max. for ZX10-2-42 and ZX10-2-126

#### Port Connections

| PORT     | (ar) |
|----------|------|
| SUM PORT | 3    |
| PORT 1   | 1    |
| PORT 2   | 2    |

#### Outline Drawing



#### Outline Dimensions (inch/mm)

|       |       |       |       |       |      |      |      |        |
|-------|-------|-------|-------|-------|------|------|------|--------|
| A     | B     | C     | D     | E     | F    | G    | H    | J      |
| .74   | .90   | .54   | .50   | .04   | .16  | .29  | .37  | —      |
| 18.80 | 22.86 | 13.72 | 12.70 | 1.02  | 4.06 | 7.37 | 9.40 | —      |
| K     | L     | M     | N     | wt.   |      |      |      |        |
| .122  | .496  | .106  | .122  | grams |      |      |      | REV. D |
| 3.10  | 12.60 | 2.69  | 3.10  | 20.0  |      |      |      | M92138 |
|       |       |       |       |       |      |      |      | ZK10-2 |
|       |       |       |       |       |      |      |      | ZK10-2 |

REV. D  
M92138  
ZX10-2-12 ED-10145/1  
ZX10-2-20 ED-10145/2  
ZX10-2-25 ED-10145/3  
ZX10-2-42 ED-10281/2  
ZX10-2-71 ED-10146/1  
ZX10-2-98 ED-10280/1  
ZX10-2-126 ED-10227/1  
ZX10-SERIES  
HY/RS/CP  
040429

designers kit available

| KIT No. | No. of Units in KIT | Description                                      | Price \$ per KIT |
|---------|---------------------|--------------------------------------------------|------------------|
| K1-ZX10 | 7                   | 1 of each model in free deluxe wood storage case | 199.95           |