

Bi-Directional Coupler

ZGBDC20-372HP+

Typical Performance Data

| FREQ. (MHz) | INSERTION LOSS ⁽¹⁾ | | COUPLING | | DIRECTIVITY | | RETURN LOSS | | | |
|----------------|-------------------------------|---------|----------|---------|-------------|---------|-------------|-------|-------|-------|
| | (dB) | | (dB) | | (dB) | | (dB) | | | |
| | IN-OUT | FWD-REV | IN-FWD | OUT-REV | IN-REV | OUT-FWD | IN | OUT | FWD | REV |
| 50 | 0.01 | 0.01 | 38.98 | 39.12 | 35.50 | 32.11 | 46.18 | 45.34 | 45.26 | 44.91 |
| 100 | 0.01 | 0.01 | 33.02 | 33.03 | 38.87 | 38.02 | 39.68 | 39.47 | 38.59 | 38.80 |
| 200 | 0.02 | 0.02 | 27.27 | 27.27 | 34.15 | 33.54 | 35.08 | 34.97 | 33.34 | 33.46 |
| 300 | 0.03 | 0.03 | 24.20 | 24.19 | 31.61 | 30.79 | 33.72 | 33.62 | 32.43 | 32.45 |
| 380 | 0.03 | 0.03 | 22.61 | 22.61 | 30.20 | 29.53 | 34.58 | 34.89 | 32.59 | 32.51 |
| 400 | 0.03 | 0.03 | 22.31 | 22.30 | 29.91 | 29.44 | 35.38 | 35.71 | 32.82 | 32.77 |
| 500 | 0.03 | 0.03 | 21.14 | 21.12 | 28.94 | 28.66 | 41.76 | 42.08 | 36.55 | 36.16 |
| 600 | 0.04 | 0.04 | 20.46 | 20.45 | 28.29 | 28.84 | 45.41 | 44.46 | 43.96 | 42.08 |
| 700 | 0.04 | 0.04 | 20.15 | 20.13 | 28.17 | 29.67 | 35.95 | 35.63 | 43.29 | 42.47 |
| 800 | 0.05 | 0.05 | 20.10 | 20.08 | 27.99 | 30.59 | 32.37 | 32.04 | 37.36 | 37.19 |
| 900 | 0.06 | 0.05 | 20.20 | 20.17 | 27.79 | 29.67 | 31.69 | 31.56 | 35.02 | 34.70 |
| 1000 | 0.06 | 0.06 | 20.35 | 20.31 | 27.12 | 27.18 | 33.04 | 33.03 | 34.84 | 34.12 |
| 1100 | 0.06 | 0.06 | 20.46 | 20.41 | 26.25 | 24.80 | 37.46 | 37.90 | 36.15 | 34.90 |
| 1200 | 0.07 | 0.06 | 20.48 | 20.41 | 25.32 | 23.34 | 52.23 | 57.05 | 38.47 | 36.51 |
| 1300 | 0.07 | 0.07 | 20.42 | 20.34 | 24.75 | 22.72 | 40.20 | 40.31 | 38.73 | 37.75 |
| 1400 | 0.08 | 0.07 | 20.32 | 20.24 | 24.39 | 22.74 | 35.25 | 35.39 | 37.09 | 37.42 |
| 1500 | 0.08 | 0.08 | 20.25 | 20.16 | 24.26 | 23.14 | 33.69 | 33.71 | 36.61 | 36.88 |
| 1600 | 0.09 | 0.08 | 20.23 | 20.14 | 24.09 | 23.51 | 33.47 | 33.57 | 37.42 | 36.69 |
| 1700 | 0.09 | 0.08 | 20.29 | 20.19 | 23.81 | 23.88 | 34.45 | 34.43 | 40.07 | 37.40 |
| 1800 | 0.10 | 0.09 | 20.39 | 20.29 | 23.25 | 23.84 | 36.26 | 36.16 | 42.67 | 38.38 |
| 1900 | 0.10 | 0.09 | 20.50 | 20.38 | 22.64 | 23.12 | 39.29 | 38.80 | 39.62 | 39.00 |
| 2000 | 0.10 | 0.10 | 20.57 | 20.44 | 22.02 | 21.91 | 44.51 | 41.99 | 35.79 | 38.99 |
| 2100 | 0.11 | 0.10 | 20.57 | 20.43 | 21.56 | 20.62 | 58.42 | 47.49 | 33.40 | 37.83 |
| 2200 | 0.11 | 0.11 | 20.52 | 20.37 | 21.25 | 19.73 | 43.97 | 47.44 | 32.18 | 36.29 |
| 2300 | 0.12 | 0.11 | 20.44 | 20.29 | 21.10 | 19.31 | 37.00 | 37.85 | 32.08 | 34.60 |
| 2400 | 0.12 | 0.12 | 20.37 | 20.24 | 21.13 | 19.47 | 33.72 | 33.46 | 33.13 | 33.29 |
| 2500 | 0.13 | 0.12 | 20.36 | 20.22 | 21.11 | 19.90 | 31.73 | 30.87 | 35.45 | 32.45 |
| 2600 | 0.13 | 0.12 | 20.40 | 20.27 | 20.97 | 20.27 | 30.94 | 30.12 | 38.25 | 32.55 |
| 2700 | 0.14 | 0.13 | 20.50 | 20.34 | 20.38 | 20.31 | 30.88 | 30.34 | 37.73 | 33.93 |
| 2800 | 0.14 | 0.13 | 20.60 | 20.43 | 19.69 | 19.97 | 32.09 | 31.78 | 34.61 | 36.69 |
| 2900 | 0.14 | 0.13 | 20.67 | 20.48 | 18.90 | 19.40 | 35.24 | 34.05 | 32.22 | 37.00 |
| 3000 | 0.15 | 0.14 | 20.70 | 20.49 | 18.52 | 18.64 | 42.59 | 37.78 | 30.98 | 32.78 |
| 3100 | 0.15 | 0.15 | 20.66 | 20.44 | 18.68 | 17.97 | 43.42 | 41.31 | 30.64 | 29.54 |
| 3200 | 0.16 | 0.15 | 20.58 | 20.38 | 19.29 | 17.39 | 36.33 | 38.13 | 31.29 | 27.80 |
| 3300 | 0.16 | 0.16 | 20.51 | 20.32 | 19.87 | 17.01 | 33.36 | 34.05 | 32.71 | 27.38 |
| 3400 | 0.17 | 0.16 | 20.48 | 20.28 | 19.48 | 16.71 | 31.27 | 31.02 | 35.23 | 28.44 |
| 3500 | 0.17 | 0.16 | 20.50 | 20.29 | 17.92 | 16.50 | 29.13 | 28.70 | 40.54 | 31.77 |
| 3600 | 0.18 | 0.16 | 20.57 | 20.36 | 16.21 | 16.43 | 27.23 | 26.62 | 44.45 | 41.33 |
| 3700 | 0.19 | 0.17 | 20.68 | 20.46 | 15.02 | 16.56 | 25.63 | 24.98 | 31.77 | 32.05 |
| 3800 | 0.20 | 0.18 | 20.78 | 20.58 | 14.58 | 16.94 | 24.86 | 24.14 | 25.81 | 25.18 |
| 3900 | 0.20 | 0.22 | 20.51 | 20.41 | 16.41 | 15.90 | 25.70 | 24.82 | 22.03 | 21.00 |
| 4000 | 0.20 | 0.23 | 20.64 | 20.47 | 17.29 | 16.19 | 29.67 | 28.40 | 20.67 | 19.88 |

⁽¹⁾ Does not include coupling loss