

Coaxial Frequency Mixer

ZP-2+

Level 7 (LO Power +7 dBm) 50 to 1000 MHz



Generic photo used for illustration purposes only

CASE STYLE: GG60

| Connectors | Model |
|------------|---------|
| BNC | ZP-2+ |
| SMA | ZP-2-S+ |

+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Maximum Ratings

| | |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Power | 50mW |
| IF Current | 40mA |

Permanent damage may occur if any of these limits are exceeded.

Coaxial Connections

| | |
|----|---|
| LO | L |
| RF | R |
| IF | X |

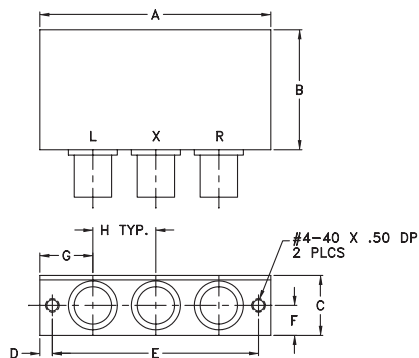
Features

- low conversion loss, 5.85 dB typ.
- wideband, 50 to 1000 MHz
- excellent L-R isolation, 47 dB typ., L-I, 44 dB typ.
- rugged shielded case

Applications

- VHF/UHF
- cellular
- instrumentation

Outline Drawing



Outline Dimensions (inch/mm)

| A | B | C | D | E | F | G | H | wt |
|-------|-------|-------|------|-------|------|-------|-------|-------|
| 2.31 | 1.20 | .60 | .125 | 2.062 | .30 | .53 | .63 | grams |
| 58.67 | 30.48 | 15.24 | 3.18 | 52.37 | 7.62 | 13.46 | 16.00 | 75.0 |

Electrical Specifications

| FREQUENCY (MHz) | CONVERSION LOSS (dB) | LO-RF ISOLATION (dB) | | | | | LO-IF ISOLATION (dB) | | | | | | | | | | |
|--------------------|-------------------------------|----------------------|----------|------------------|------------------|------|----------------------|------|------|------|------|------|------|------|------|----|----|
| | | Mid-Band m | | Total Range Max. | | | L | M | U | L | M | U | | | | | |
| LO/RF f_L-f_U | IF \bar{X} σ Max. | \bar{X} | σ | Max. | Total Range Max. | Typ. | Min. | Typ. | Min. | Typ. | Min. | Typ. | Min. | Typ. | Min. | | |
| 50-1000 | DC-1000 | 5.85 | 0.10 | 7.5 | 9.0 | 58 | 40 | 47 | 30 | 42 | 25 | 50 | 35 | 44 | 20 | 29 | 18 |

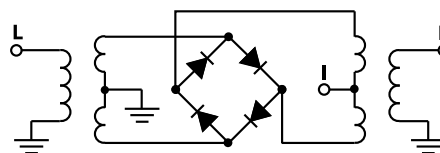
1 dB COMP.: +1 dBm typ.

L = 50-100 MHz M = 100-500 MHz U = upper range [$f_U/2$ to f_L]
m = mid band [$2f_L$ to $f_U/2$]

Typical Performance Data

| Frequency (MHz) | Conversion Loss (dB) | Isolation L-R (dB) | Isolation L-I (dB) | VSWR RF Port (:1) | VSWR LO Port (:1) | |
|-----------------|----------------------|--------------------|--------------------|-------------------|-------------------|----------|
| | | | | | | LO +7dBm |
| RF | LO | LO +7dBm | LO +7dBm | LO +7dBm | LO +7dBm | |
| 50.00 | 80.00 | 6.03 | 61.24 | 62.94 | 1.08 | 2.52 |
| 100.00 | 70.00 | 6.12 | 55.20 | 58.22 | 1.10 | 2.47 |
| 129.17 | 99.17 | 6.03 | 53.19 | 56.36 | 1.12 | 2.42 |
| 200.00 | 170.00 | 5.94 | 49.63 | 53.04 | 1.17 | 2.35 |
| 208.33 | 178.33 | 5.97 | 49.40 | 52.95 | 1.22 | 2.31 |
| 287.50 | 257.50 | 5.98 | 46.76 | 49.61 | 1.27 | 2.32 |
| 340.28 | 310.28 | 5.94 | 45.51 | 47.70 | 1.33 | 2.34 |
| 366.67 | 336.67 | 5.91 | 45.07 | 46.56 | 1.36 | 2.32 |
| 445.83 | 415.83 | 5.88 | 43.51 | 43.99 | 1.43 | 2.32 |
| 498.61 | 468.61 | 5.96 | 42.80 | 42.71 | 1.47 | 2.34 |
| 500.00 | 470.00 | 5.98 | 42.81 | 42.75 | 1.50 | 2.33 |
| 551.39 | 521.39 | 6.04 | 42.43 | 42.00 | 1.58 | 2.37 |
| 630.56 | 600.56 | 6.27 | 41.96 | 39.82 | 1.68 | 2.38 |
| 683.33 | 653.33 | 6.36 | 41.15 | 38.97 | 1.76 | 2.35 |
| 709.72 | 679.72 | 6.45 | 40.66 | 38.42 | 1.79 | 2.33 |
| 788.89 | 758.89 | 6.59 | 39.89 | 37.39 | 1.94 | 2.34 |
| 868.06 | 838.06 | 6.81 | 39.69 | 36.49 | 2.11 | 2.38 |
| 947.22 | 917.22 | 7.04 | 39.66 | 34.99 | 2.31 | 2.42 |
| 973.61 | 943.61 | 7.23 | 39.91 | 34.80 | 2.37 | 2.42 |
| 1000.00 | 970.00 | 7.37 | 39.73 | 34.55 | 2.44 | 2.41 |

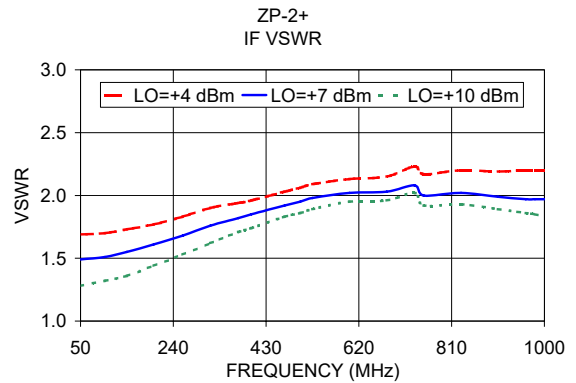
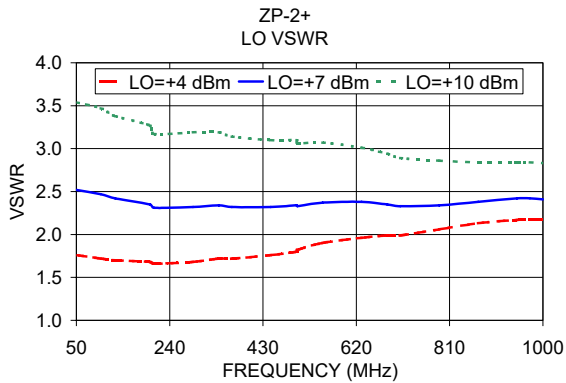
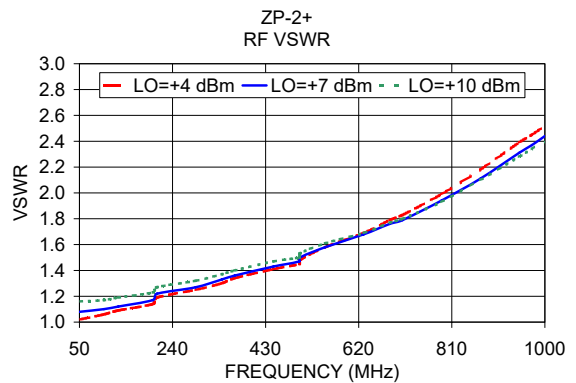
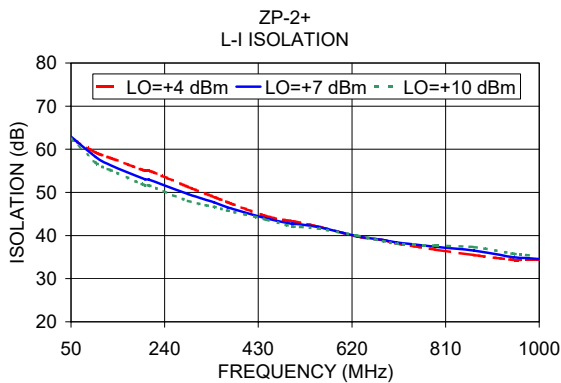
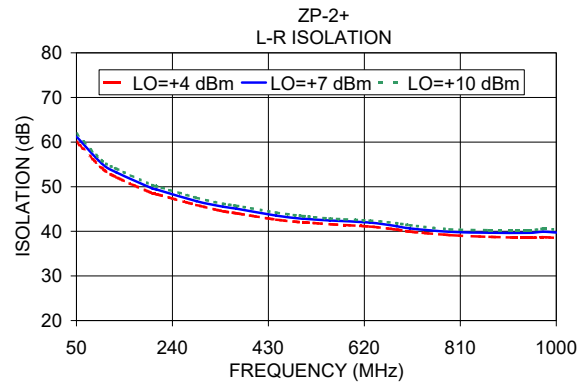
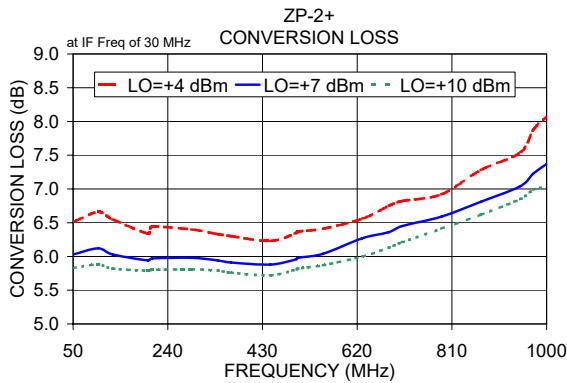
Electrical Schematic



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.
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