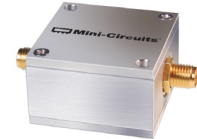


X2 Frequency Multiplier

50Ω Output 140 to 3000 MHz

FK-3000+



CASE STYLE: H16

Connectors Model

SMA FK-3000+

BRACKET (OPTION "B")

+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 Input Power 200mW

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

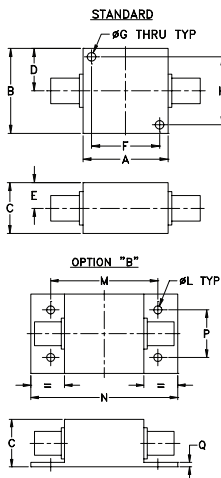
Features

- wideband, 140 to 3000 MHz
- low insertion loss, 11 dB typ.
- rugged shielded case

Applications

- synthesizers
- local oscillators

Outline Drawing



Outline Dimensions (Inch)

| A | B | C | D | E | F | G | H |
|-------|-------|-------|-------|------|-------|------|-------|
| 1.25 | 1.25 | .75 | .63 | .38 | 1.000 | .125 | 1.000 |
| 31.75 | 31.75 | 19.05 | 16.00 | 9.65 | 25.40 | 3.18 | 25.40 |

| J | K | L | M | N | P | Q | wt |
|----|----|------|-------|-------|-------|------|-------|
| -- | -- | .125 | 1.688 | 2.18 | .750 | .06 | grams |
| -- | -- | 3.18 | 42.88 | 55.37 | 19.05 | 1.52 | 70.0 |

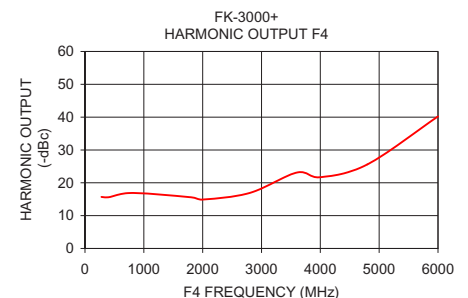
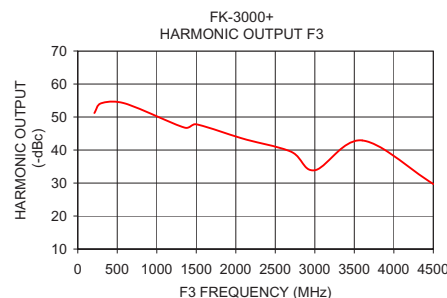
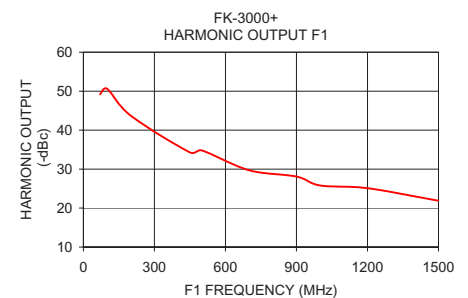
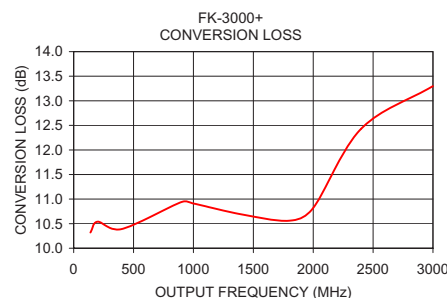
Electrical Specifications

| MULTIPLICATION FACTOR | FREQUENCY (MHz) | | INPUT POWER (dBm) | | CONVERSION LOSS (dB) | | *HARMONIC OUTPUT (dBc) | | | | | |
|-----------------------|-----------------|-----------|-------------------|------|----------------------|------|------------------------|------|------|------|------|------|
| | F1 | F2 | | | | | F1 | | F3 | | F4 | |
| | Input | Output | Min. | Max. | Typ. | Max. | Typ. | Min. | Typ. | Min. | Typ. | Min. |
| 2 | 70-1000 | 140-2000 | 12 | 15 | 11.0 | 14.0 | 31 | 20 | 40 | 25 | 15 | 10 |
| | 1000-1500 | 2000-3000 | 12 | 15 | 12.0 | 17.5 | 22 | 15 | 30 | 20 | 30 | 14 |

* Harmonics of input frequency below the power level of F2

Typical Performance Data

| Input Frequency (MHz) | Conversion Loss (dB) F2 | Harmonic Output (-dBc) | | |
|-----------------------|-------------------------|------------------------|-------|-------|
| | | F1 | F3 | F4 |
| 70.00 | 10.32 | 49.20 | 51.20 | 15.70 |
| 100.00 | 10.54 | 50.60 | 54.20 | 15.60 |
| 200.00 | 10.39 | 43.70 | 54.10 | 16.90 |
| 450.00 | 10.94 | 34.30 | 46.80 | 15.60 |
| 500.00 | 10.91 | 34.80 | 47.80 | 14.90 |
| 700.00 | 10.69 | 29.70 | 43.40 | 16.90 |
| 900.00 | 10.56 | 28.10 | 39.50 | 23.10 |
| 1000.00 | 10.82 | 25.80 | 33.90 | 21.70 |
| 1200.00 | 12.43 | 25.10 | 42.90 | 25.60 |
| 1500.00 | 13.30 | 21.90 | 29.70 | 40.20 |



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/MCLStore/terms.jsp

