

X2 Frequency Multiplier

NON-CATALOG

GK-3

50Ω Output 0.1 to 300 MHz



CASE STYLE: L20

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

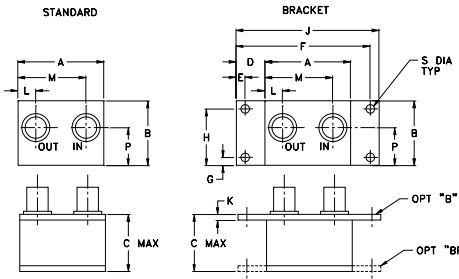
- low insertion loss, 11 dB typ.
- rugged shielded case

Applications

- synthesizers
- local oscillators

| Connectors | Model | Price | Qty. |
|------------------------------|-------|-------|---------------------|
| BNC | GK-3 | | Contact Sales Dept. |
| BRACKET (OPTION "B") | | | |
| BRACKET (OPTION "BR") | | | |

Outline Drawing



Outline Dimensions (inch)

| A | B | C | D | E | F | G | J | K | L | M | N | P | S | wt |
|-------|-------|-------|-------|------|-------|------|-------|---|---|---|---|---|---|----|
| 2.25 | 1.38 | 1.24 | .50 | .150 | 3.100 | .138 | 1.238 | | | | | | | |
| 57.15 | 35.05 | 31.50 | 12.70 | 3.81 | 78.74 | 3.51 | 31.45 | | | | | | | |
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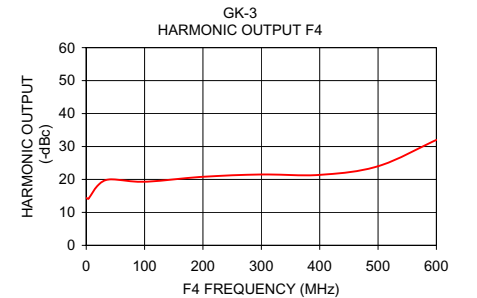
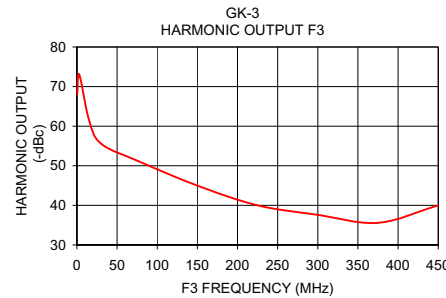
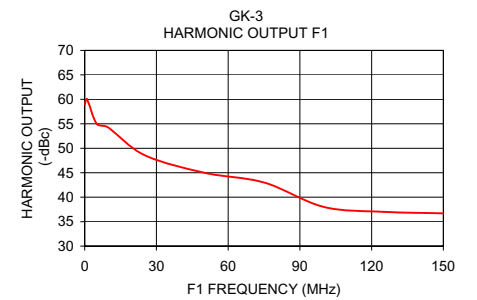
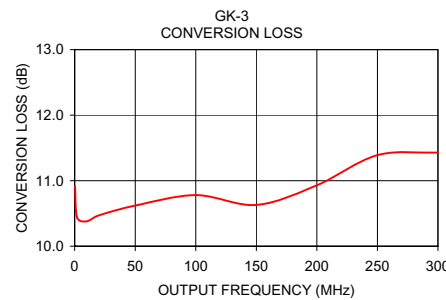
Electrical Specifications

| MULTIPLICATION FACTOR | FREQUENCY (MHz) | INPUT POWER (dBm) | | CONVERSION LOSS (dB) | | *HARMONIC OUTPUT (dBC) | | | | | |
|-----------------------|-----------------|-------------------|------|----------------------|------|------------------------|----|----|----|----|----|
| | | Min. | Max. | Typ. | Max. | F1 | F3 | F4 | | | |
| 2 | 0.05-50 | — | 13 | 11.0 | 13.0 | 40 | 30 | 45 | 30 | 16 | 12 |
| | 50-150 | — | — | 11.5 | 15.0 | 35 | 20 | 40 | 20 | 16 | 12 |

* Harmonics of input frequency below the power level of F2

Typical Performance Data

| Input Frequency (MHz) | Conversion Loss (dB) F2 | F1 | Harmonic Output (-dBc) F3 | F4 |
|-----------------------|-------------------------|-------|---------------------------|-------|
| 0.10 | 10.92 | 59.00 | 68.00 | 14.40 |
| 1.00 | 10.44 | 60.00 | 73.00 | 14.20 |
| 5.00 | 10.38 | 55.00 | 61.60 | 18.20 |
| 10.00 | 10.47 | 54.20 | 55.60 | 20.00 |
| 25.00 | 10.62 | 48.60 | 51.30 | 19.30 |
| 50.00 | 10.78 | 45.00 | 45.00 | 20.80 |
| 75.00 | 10.63 | 43.00 | 40.00 | 21.50 |
| 100.00 | 10.93 | 38.00 | 37.60 | 21.40 |
| 125.00 | 11.39 | 37.00 | 35.60 | 24.00 |
| 150.00 | 11.43 | 36.70 | 40.00 | 32.00 |



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED
FIFTH MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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.

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