

X2 Frequency Multiplier

50Ω Output 0.1 to 300 MHz

RK-3+
RK-3



Maximum Ratings

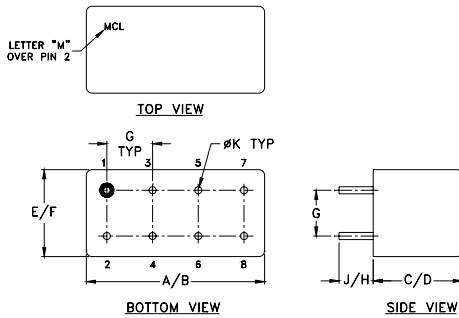
| | |
|-----------------------|----------------|
| Operating Temperature | -55°C to 100°C |
| Storage Temperature | -55°C to 100°C |
| RF Input Power | 200mW |

Pin Connections

| | |
|-------------|--------------------|
| INPUT | 1,3,4 [^] |
| OUTPUT | 8 |
| GROUND | 2,5,6,7 |
| CASE GROUND | 2 |

[^] pins must be connected together externally

Outline Drawing



Outline Dimensions (Inch/mm)

| | | | | | |
|-------|-------|------|-------|------|-------|
| A | B | C | D | E | F |
| .770 | .800 | .385 | .400 | .370 | .400 |
| 19.56 | 20.32 | 9.78 | 10.16 | 9.40 | 10.16 |
| G | H | J | K | | wt |
| .200 | .20 | .14 | .031 | | grams |
| 5.08 | 5.08 | 3.56 | 0.79 | | 5.2 |

Features

- low conversion loss, 11 dB typ.
- hermetic case

Applications

- synthesizers
- local oscillators
- military, hi-rel applications

CASE STYLE: A01

PRICE: \$18.20 ea. QTY (1-9)

+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

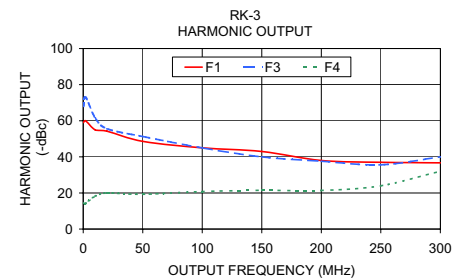
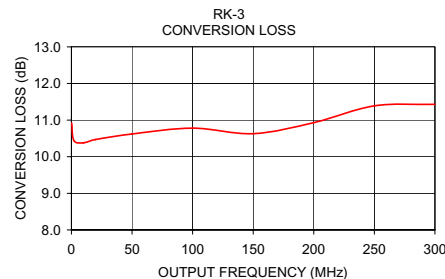
Electrical Specifications

| 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 | 0.05-50 | 0.1-100 | 0 | 13 | 11.0 | 17.0 | 40 | 28 | 45 | 30 | 16 | 8 |
| | 50-150 | 100-300 | 0 | 13 | 11.5 | 15.0 | 35 | 20 | 40 | 20 | 16 | 12 |

* Harmonics of input frequency below the power level of F2

Typical Performance Data

| Output Frequency (MHz) | Conversion Loss (dB) | Harmonic Output (-dBc) | | |
|------------------------|----------------------|------------------------|-------|-------|
| | | F1 | F3 | F4 |
| 0.20 | 10.92 | 59.00 | 68.00 | 14.40 |
| 2.00 | 10.44 | 60.00 | 73.00 | 14.20 |
| 10.00 | 10.38 | 55.00 | 61.60 | 18.20 |
| 20.00 | 10.47 | 54.20 | 55.60 | 20.00 |
| 50.00 | 10.62 | 48.60 | 51.30 | 19.30 |
| 100.00 | 10.78 | 45.00 | 45.00 | 20.80 |
| 150.00 | 10.63 | 43.00 | 40.00 | 21.50 |
| 200.00 | 10.93 | 38.00 | 37.60 | 21.40 |
| 250.00 | 11.39 | 37.00 | 35.60 | 24.00 |
| 300.00 | 11.43 | 36.70 | 40.00 | 32.00 |



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RF/IF MICROWAVE COMPONENTS

REV. A
M98898
RK-3
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070509