Coaxial Adapter 2.92 mm-M to 2.92 mm-M **KM-KM50+** DC to 40 GHz 50Ω

**The Big Deal** 

- Ultra-wideband, DC-40 GHz
- Flat response
- Low insertion loss, 0.13 dB typ.
- Excellent VSWR, 1.04:1 typ.



### **Product Overview**

Mini-Circuits' KM-KM50+ is a coaxial 2.92mm-M to 2.92mm-M adapter supporting a wide range of applications from DC to 40 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The KM-KF50+ features rugged, passivated stainless steel construction and measures only 0.74" (I) x 0.28" (dia.).

## **Key Features**

| Feature  | Advantages  |  |
|--|---|--|
| Wideband, DC to 40 GHz                               | Wide frequency range provides application flexibility and makes this model ideal for broad-<br>band and multi-band use.     |  |
| Excellent VSWR, 1.02:1                               | Provides good matching for $50\Omega$ systems and minimizes signal reflections across wide frequency range.                 |  |
| Low insertion loss, 0.13 dB                          | Provides excellent signal power transmission from input to output.  |  |
| Rugged, passivated stainless steel construction.     | Stands up to wear and tear in demanding environments and provides excellent reliability.                                    |  |
| Very wide operating temperature range, -55 to +100°C | Withstands extreme operating conditions and is suitable for use near high power componen-<br>try where heat rise is common. |  |

- Notes
- A 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. B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. C. 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-Circuit's website at www.minicircuits.com/MCLStore/terms.jsp



# Coaxial Adapter 2.92mm-M to 2.92mm-M

#### **50**Ω DC to 40 GHz

### **Maximum Ratings**

| Operating Temperature             | -55°C to 100°C                |  |
|-----------------------------------|-------------------------------|--|
| Storage Temperature               | -55°C to 100°C                |  |
| Permanent damage may occur if any | of these limits are exceeded. |  |

### **Features**

- flat response
- excellent VSWR, 1.02 typ. up to 18 GHz and 1.03 typ. up to 40 GHz
- · low cost adapters, available from stock
- · rugged stainless steel body, passivated

### **Applications**

interconnection of RF cable and equipment

# **KM-KM50+**



Generic photo used for illustration purposes only CASE STYLE: DJ1862

Connectors 2.92 mm-Male

KM-KM50+

Model

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

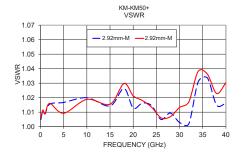
### Electrical Specifications at 25°C

| Parameter       | Condition (GHz) | Min. | Тур. | Max. | Units |
|-----------------|-----------------|------|------|------|-------|
| Frequency Range |                 | DC   |      | 40   | GHz   |
| Insertion Loss  | DC - 40         | —    | 0.13 | —    | dB    |
|                 | DC - 18         | —    | 1.02 | 1.15 |       |
| VSWR            | DC - 26         | _    | 1.02 | 1.15 | :1    |
|                 | DC - 40         | _    | 1.02 | 1.15 |       |

### **Typical Performance Data**

| Frequency<br>(GHz) | Insertion Loss<br>(dB) | VSWR<br>(:1)     |           |
|--------------------|------------------------|------------------|-----------|
|                    |                        | 2.92 mm-M 2.92 n | 2.92 mm-M |
| 0.05               | 0.01                   | 1.01             | 1.01      |
| 0.1                | 0.02                   | 1.01             | 1.01      |
| 0.5                | 0.03                   | 1.01             | 1.01      |
| 1                  | 0.04                   | 1.01             | 1.01      |
| 2                  | 0.05                   | 1.02             | 1.02      |
| 5                  | 0.07                   | 1.02             | 1.01      |
| 10                 | 0.07                   | 1.02             | 1.02      |
| 15                 | 0.09                   | 1.01             | 1.02      |
| 18                 | 0.08                   | 1.03             | 1.03      |
| 20                 | 0.09                   | 1.01             | 1.02      |
| 22                 | 0.10                   | 1.02             | 1.02      |
| 24                 | 0.10                   | 1.01             | 1.01      |
| 26                 | 0.11                   | 1.01             | 1.01      |
| 28                 | 0.13                   | 1.01             | 1.01      |
| 30                 | 0.13                   | 1.00             | 1.01      |
| 32                 | 0.14                   | 1.00             | 1.02      |
| 34                 | 0.15                   | 1.03             | 1.04      |
| 36                 | 0.16                   | 1.03             | 1.04      |
| 38                 | 0.17                   | 1.01             | 1.02      |
| 40                 | 0.17                   | 1.02             | 1.03      |

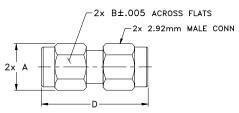
#### KM-KM50+ INSERTION LOSS 0.21 ලි <sup>0.18</sup> B) SCI 0.15 0.12 0.09 0.06 0.00 0.03 0.00 0 5 10 15 20 25 30 35 40 FREQUENCY (GHz)



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### **Outline Drawing**



### Outline Dimensions (inch)

| w     | Е | D     | С | в     | А    |
|-------|---|-------|---|-------|------|
| grams |   | 0.80  |   | 0.312 | 0.36 |
| 5.4   |   | 20.20 |   | 7.93  | 9.14 |



REV. OR M159549 KM-KM50-RS/CP 200601