

50Ω DC to 40 GHz 2.4 mm-Female to 2.92 mm-Male

#### **THE BIG DEAL**

- Ultra-Wideband, DC to 40 GHz
- Low Insertion Loss, 0.15 dB Typ.
- Excellent VSWR, 1.05:1 Typ.
- Flat response



Generic photo used for illustration purposes only

Model No.	KM-24F+			
Case Style	DJ2383			
Connectors	2.4 mm Female to 2.92 mm Male			

# +RoHS Compliant The +Suffix identifies RoHS Compliance. See our website for methodologies and qualifications

#### **APPLICATIONS**

· Interconnection of RF cable and equipment

# **PRODUCT OVERVIEW**

Mini-Circuits' KM-24F+ is a coaxial 2.4 mm-F to 2.92 mm-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-24F+ features passivated stainless steel construction and measures only 0.85'' (I)  $\times 0.36''$  (dia.).

#### **KEY FEATURES**

Features	Advantages
Wideband, DC to 40 GHz	Wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use
Excellent VSWR, 1.05:1 Typ.	Provides good matching for $50\Omega$ systems and minimizes signal reflections across wide frequency range.
Low Insertion Loss, 0.15 dB Typ.	Provides excellent signal power transmission from input to output.
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 components where heat rise is common.

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# **ELECTRICAL SPECIFICATIONS AT 25°C**

Parameter	Frequency (GHz)	Min.	Тур.	Max.	Units
Frequency Range	-	DC	-	40	GHz
Insertion Loss	DC - 5	-	0.05	-	dB
	5 - 10	-	0.12	-	
	10 - 20	-	0.15	-	
	20 - 40	-	0.16	0.6	
VSWR	DC - 5	-	1.03	1.15	
	5 - 10	-	1.03	1.15	.1
	10 - 20	-	1.05	1.15	:1
	20 - 40	-	1.09	1.15	

# **ABSOLUTE MAXIMUM RATINGS**

Parameter	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.

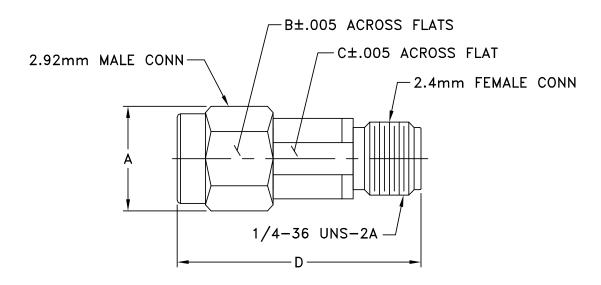
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# **COAXIAL CONNECTIONS**

Mini-Circuits

Connector 1	2.4 mm Female		
Connector 2	2.92 mm Male		

# **OUTLINE DRAWING**



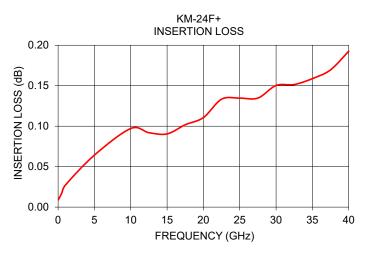
# OUTLINE DIMENSIONS (Inches)

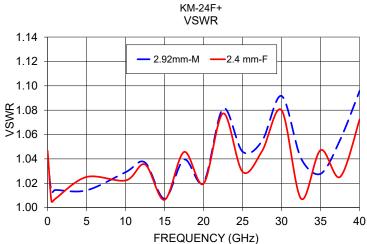
Α	В	С	D	Ε	wt
0.36	0.312	0.236	0.850		grams
9.14	7.93	5.99	21.59		3.8

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#### TYPICAL PERFORMANCE DATA AND CHARTS

Frequency	Insertion Loss (dB)	VSWR (:1)		
(GHz)		2.4mm Female	2.92mm Male	
0.01	0.01	1.04	1.05	
0.5	0.02	1.01	1.01	
1.0	0.03	1.01	1.01	
5.0	0.06	1.01	1.03	
10.0	0.10	1.03	1.02	
12.5	0.09	1.04	1.04	
15.0	0.09	1.01	1.01	
17.5	0.10	1.04	1.05	
20.0	0.11	1.02	1.02	
22.5	0.13	1.08	1.08	
25.0	0.13	1.05	1.03	
27.5	0.13	1.05	1.05	
30.0	0.15	1.09	1.08	
32.5	0.15	1.04	1.01	
35.0	0.16	1.03	1.05	
37.5	0.17	1.06	1.03	
40.0	0.19	1.10	1.07	





#### 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-Circuits' website at www.minicircuits.com/terms/viewterm.html