

**KM-35F+** 

50Ω DC to 33 GHz 2.92 mm Male to 3.5 mm Female Straight

#### **THE BIG DEAL**

- Ultra-wideband, DC to 33 GHz
- Low insertion loss, 0.09 dB Typ.
- Excellent VSWR, 1.04:1 Typ.
- Flat response



Generic photo used for illustration purposes only

Model No.	KM-35F+		
Case Style	DJ3418		
Connectors	2.92 mm Male to 3.5 mm Female		

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

#### **APPLICATIONS**

- Test & Measurement Equipment
- · Radar, EW and ECM Defense Systems
- LTE & 5G MIMO Infrastructure

#### **PRODUCT OVERVIEW**

Mini-Circuits' KM-35F+ is a coaxial 2.92mm Male to 3.5mm Female adapter supporting a wide range of applications from DC to 33 GHz. This model provides excellent VSWR, low insertion loss, and flat response versus frequency. The KM-35F+ features passivated stainless steel construction and measures only 0.81" in length.

#### **KEY FEATURES**

Features	Advantages		
Wideband, DC to 33 GHz	Wide frequency range provides application flexibility and makes this model ideal for broadband and multi-band use		
Excellent VSWR, 1.04:1 Typ.	Provides good matching for $50\Omega$ systems and minimizes signal reflections across wide frequency range.		
Low insertion loss, 0.09 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, -45 to +125°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	-	33	GHz
Insertion Loss	0.01-10	-	0.05	0.40	
	10-20	-	0.09	0.40	dB
	20-33	-	0.13	0.40	
VSWR	0.01-10	-	1.03	1.15	
	10-20	-	1.04	1.15	:1
	20-33	-	1.05	1.15	

#### **MAXIMUM RATINGS**

Parameter	Ratings
Operating Temperature	-45°C to 125°C
Storage Temperature	-45°C to 125°C

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



# Adapter

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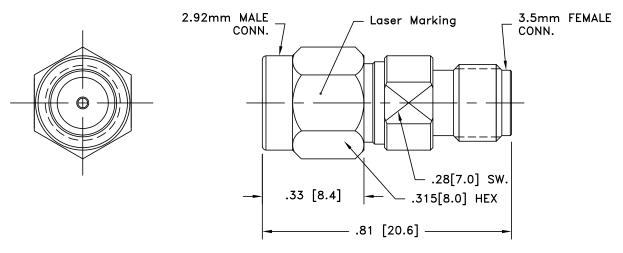
#### **COAXIAL CONNECTIONS**

Connector 1	2.92mm-Male
Connector 2	3.5mm-Female

#### **CONNECTOR SPECIFICATIONS**

	Connector 1	Connector 2	
Connector Type	2.92mm Male 3.5mm Female		
Orientation	Straight		
Impedance	50 Ω		
Connector Body	Passivated Stainless Steel		
Contact	Gold Plated Beryllium Copper		
Insulator	ULTEM-1000		
Lock Ring	Passivated Stainless Steel		
Gasket	Silicone Rubber		

#### **OUTLINE DRAWING**



Weight: 4.7 grams

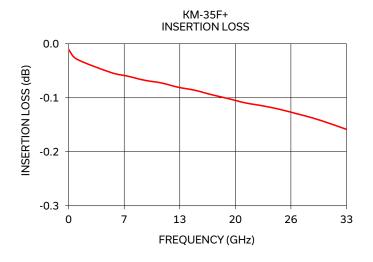
Dimensions are in inches [mm]. Tolerances: 2 Pl.±.03; 3 PL ±.015

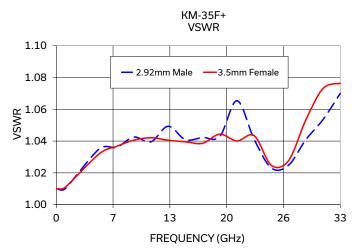
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#### **TYPICAL PERFORMANCE DATA AND CHARTS**

Frequency	Insertion Loss (dB)	VSWR (:1)		
(MHz)		2.92mm Male	3.5mm Female	
0.01	0.01	1.01	1.01	
0.10	0.01	1.01	1.01	
1.00	0.03	1.01	1.01	
5.00	0.05	1.04	1.03	
7.00	0.06	1.04	1.04	
9.00	0.07	1.04	1.04	
11.00	0.07	1.04	1.04	
13.00	0.08	1.05	1.04	
15.00	0.09	1.04	1.04	
17.00	0.09	1.04	1.04	
19.00	0.10	1.04	1.04	
21.00	0.11	1.07	1.04	
23.00	0.11	1.04	1.04	
25.00	0.12	1.02	1.02	
27.00	0.13	1.02	1.03	
29.00	0.14	1.04	1.05	
31.00	0.15	1.05	1.07	
33.00	0.16	1.07	1.08	





#### 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



## Adaptor 2.92mm-Male to 3.5mm-Female

KM-35F+

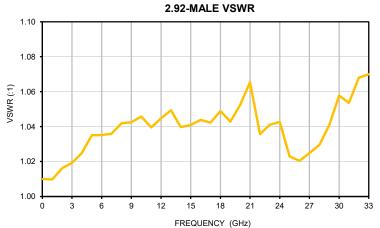
Typical Performance Data

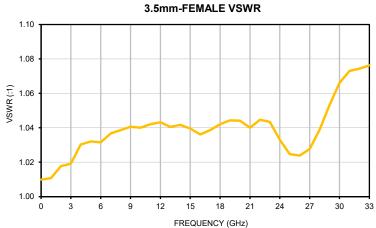
FREQ.	INSERTION LOSS	2.92mm-MALE VSWR	3.5mm-FEMALE VSWR
(GHz)	(dB)	(:1)	(:1)
0.01	0.01	1.01	1.01
0.1	0.01	1.01	1.01
1.0	0.03	1.01	1.01
2.0	0.03	1.02	1.02
3.0	0.04	1.02	1.02
4.0	0.05	1.02	1.03
5.0	0.05	1.04	1.03
6.0	0.06	1.04	1.03
7.0	0.06	1.04	1.04
8.0	0.06	1.04	1.04
9.0	0.07	1.04	1.04
10.0	0.07	1.05	1.04
11.0	0.07	1.04	1.04
12.0	0.08	1.04	1.04
13.0	0.08	1.05	1.04
14.0	0.08	1.04	1.04
15.0	0.09	1.04	1.04
16.0	0.09	1.04	1.04
17.0	0.09	1.04	1.04
18.0	0.10	1.05	1.04
19.0	0.10	1.04	1.04
20.0	0.11	1.05	1.04
21.0	0.11	1.07	1.04
22.0	0.11	1.04	1.04
23.0	0.11	1.04	1.04
24.0	0.12	1.04	1.03
25.0	0.12	1.02	1.02
26.0	0.13	1.02	1.02
27.0	0.13	1.02	1.03
28.0	0.13	1.03	1.04
29.0	0.14	1.04	1.05
30.0	0.14	1.06	1.07
31.0	0.15	1.05	1.07
32.0	0.15	1.07	1.07
33.0	0.16	1.07	1.08



### Typical Performance Curves



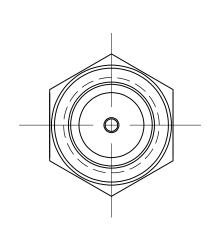


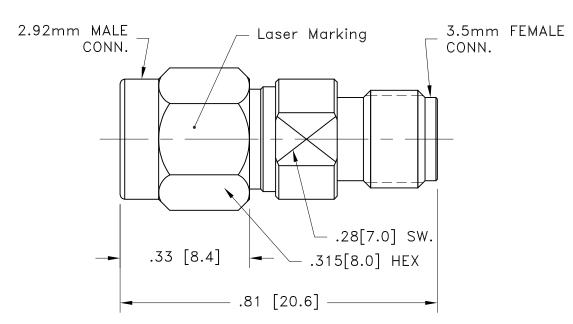




**Outline Dimensions** 

**DJ3418** 





Weight: 4.7 grams

Dimensions are in inches (mm). Tolerances: 2 Pl.±.03; 3 Pl. ±.015

Notes:

Case material: Stainless Steel
 Case Finish: Passivation



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Mini-Circuits ISO 9001 & ISO 14001 Certified

#### **Environmental Specifications**

#### ENV70T1



All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

Specification	Test/Inspection Condition	Reference/Spec	
Operating Temperature	-45° C to 125° C Ambient Environment	Individual Model Data Sheet	
Storage Temperature	-45° C to 125° C Ambient Environment	Individual Model Data Sheet	
Thermal shock	-45° C to 125° C, 100 cycles	MIL-STD-202, Method 107	
Connector Durability	500 mating/unmating cycles	MIL-PRF-39012E, PARAGRAPH 4.6.12	
Drop Test	3' height, 3 times		

ENV70T1 Rev: OR

10/25/22

DCO-1009 File: ENV70T1.pdf