

THE BIG DEAL

- Q-band frequency range, 33 to 50 GHz
- Excellent VSWR, 1.2:1 typ.
- Low insertion loss, 0.25dB typ.
- Compact design
- UG383/U waveguide cover flange
- 2.4mm-F connector

APPLICATIONS

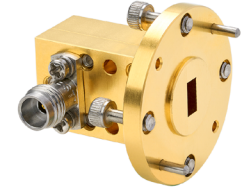
- Instrumentation and Lab use
- Rapid Prototyping
- Waveguide Systems
- Radars
- Communications
- Industrial, Scientific and Medical
- 5G Cellular Mobile

PRODUCT OVERVIEW

Mini-Circuits' WR22-VFR+ is a waveguide to coax adapter operating from 33 to 50 GHz. This product features a WR22 waveguide interface with a precision standard UG383/U-Flange to 2.4 mm-F coaxial connector. The WR22-VFR+ is machined from aluminum alloy 6061-T6 and gold-plated to ensure repeatable RF performance. This adapter has applications in laboratories, Q-Band communications, Radars and more.

KEY FEATURES

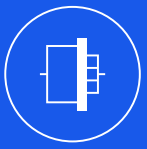
Feature	Advantages
Wideband, 33 to 50 GHz	Full operating frequency range of WR22 waveguide
Low insertion loss/excellent VSWR	Key for critical coax to waveguide transition requirements



Generic photo used for illustration purposes only

Model No.	WR22-VFR+
Case Style	UW3147-1
Connector 1	2.4mm-F
Connector 2	WR22 UG383/U Cover Flange

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



ELECTRICAL SPECIFICATIONS AT 25°C

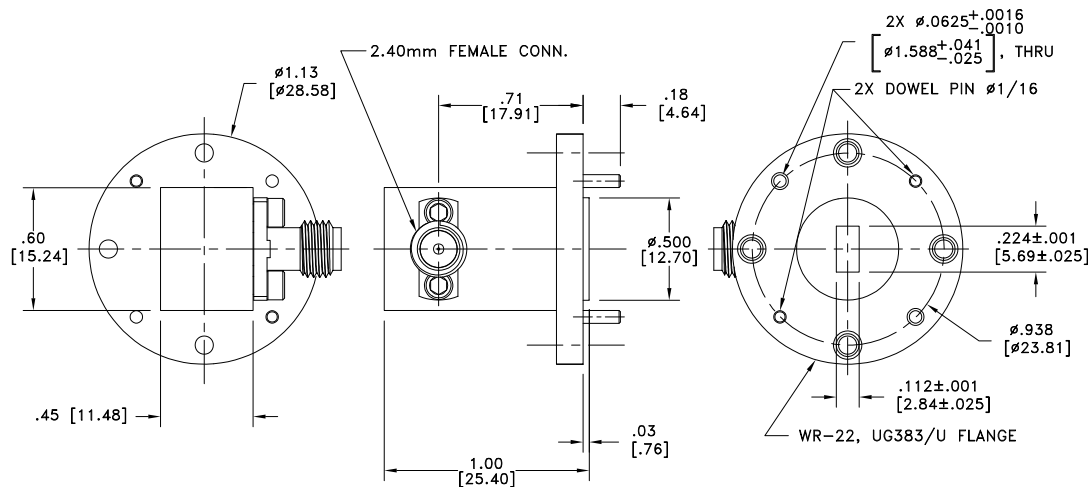
Parameter	Condition (GHz)	Min.	Typ.	Max.	Units
Frequency Range		33		50	GHz
Insertion Loss	33 - 50		0.25	0.50	dB
	33 - 36		0.25		
	39 - 45		0.25		
	47 - 50		0.3		
VSWR	33 - 50		1.2	1.45	:1
	33 - 36		1.3		
	39 - 45		1.15		
	47 - 50		1.2		

MAXIMUM RATINGS

Parameter	Ratings
Operating Case Temperature	-40 °C to +85 °C
Storage Temperature	-55 °C to +100 °C

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

OUTLINE DRAWING

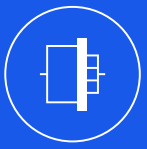


Weight: 25 grams

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

Notes:

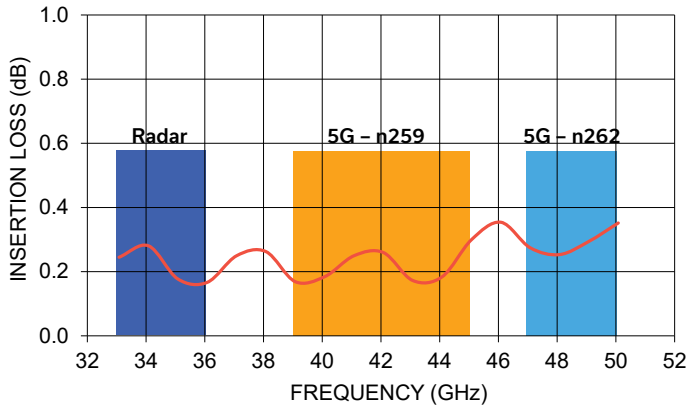
1. Case material: Aluminum alloy.
2. Case Finish: Gold plated.



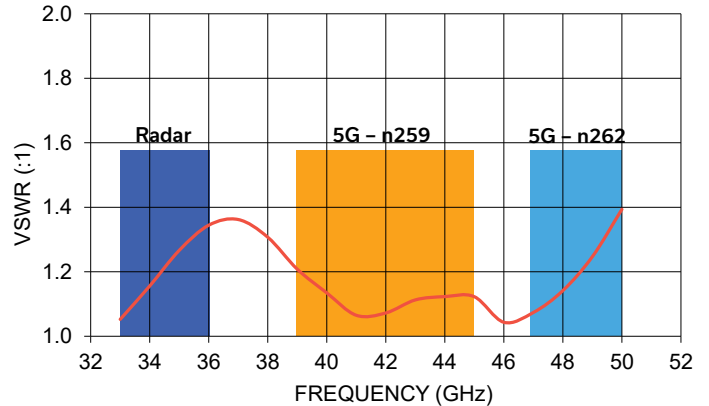
TYPICAL PERFORMANCE DATA

Frequency (GHz)	Insertion Loss (dB)	VSWR (:1)
33	0.25	1.05
34	0.28	1.16
35	0.18	1.27
36	0.17	1.34
37	0.25	1.36
38	0.26	1.31
39	0.17	1.21
40	0.19	1.13
41	0.25	1.07
42	0.26	1.07
43	0.17	1.11
44	0.18	1.12
45	0.30	1.12
46	0.35	1.04
47	0.28	1.07
48	0.25	1.14
49	0.30	1.25
50	0.35	1.39

WR22-VFR+
INSERTION LOSS



WR22-VFR+
VSWR



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/MCLStore/terms.jsp