

Full Band Waveguide WR28 to 2.92mm Adapter 26.5~40GHz



Note: The photo is for illustration purposes only. Please refer to outline drawing.

Features

- High power handling capability up to 50W
- Wide band operation
- High isolation within operational band
- Low Insertion loss

Product Description

RFWA28E9F is an end launch full band waveguide adapter with a frequency range of 26.5 to 40GHz.

The maximum insertion loss is 0.15dB.

The operating temperature of this product is within -40 to +85°C

Typical Applications

- Wireless Infrastructure
- Military and Aerospace Applications
- Test Instrumentation
- Radar Systems
- 5G Wireless Communications
- Microwave Radio Systems
- TR Modules
- Research and Development
- Cellular Base Stations

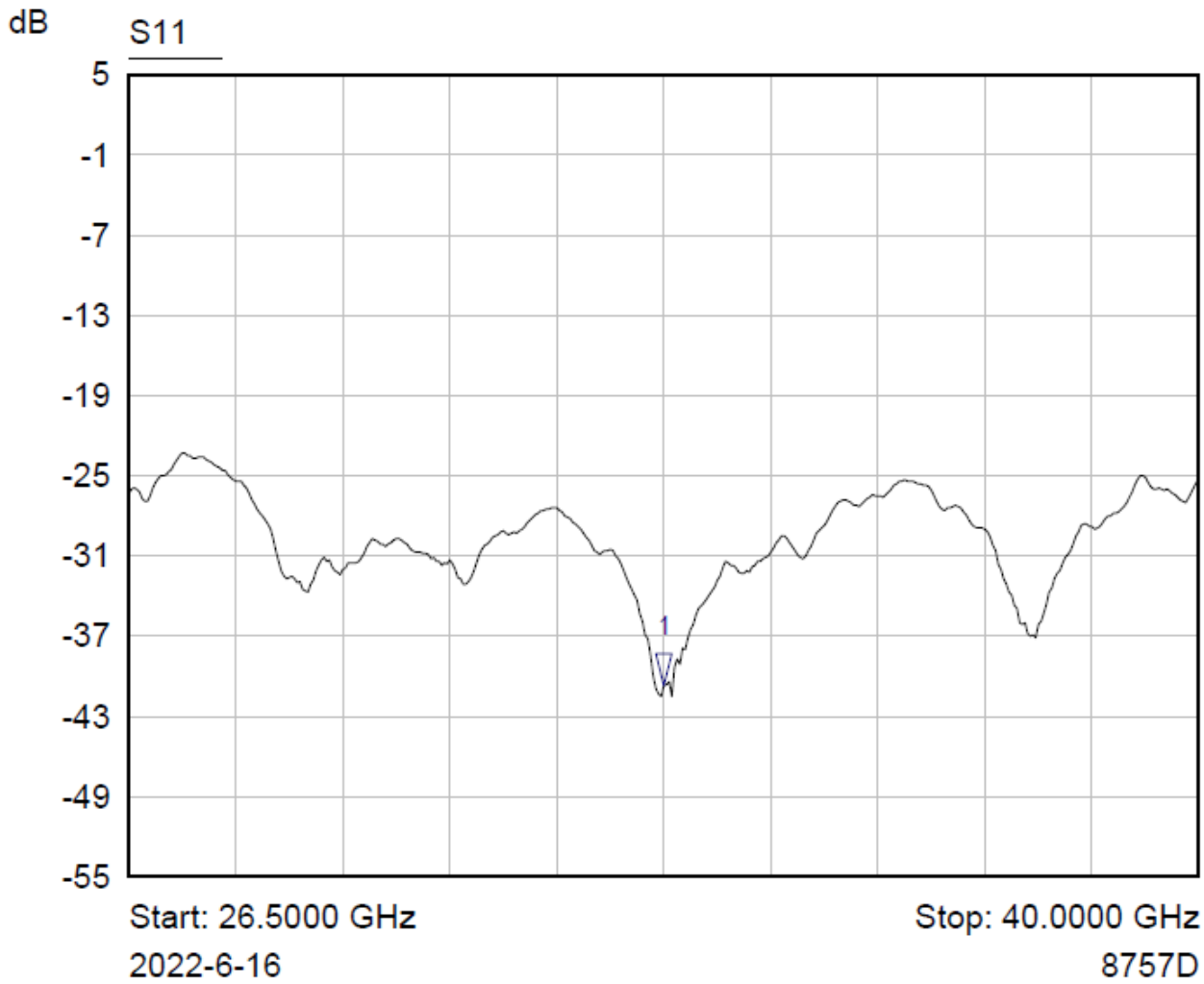
Electrical Specifications($T_A=25^\circ\text{C}$)

Parameter	Min	Typ	Max	Units
Frequency Range		26.5 – 40		GHz
Insertion Loss			0.15	dB
VSWR		1.15	1.2	:1
Power Handling		50		W
Weight		0.04		lbs.
Impedance		50		Ω
Flange Type		UG599/U		
Input / Output Connectors		2.92mm-Female		

Environmental Specifications and Test Standards

Parameter	Description
Operational Temperature	-40°C to +85°C (Case Temperature)
Storage Temperature	-50°C to +105°C
Thermal Shock	-40°C → +85°C (5 Cycles / 10 hours)
**Random Vibration	MIL-STD-202G Table 214-I, Test Condition Letter C 1.5 Hours Per Axis
Shock	1. Weight >20g, 50g half sine wave for 11ms, Speed variation 3.44m/s 2. Weight <=20g, 100g Half sine wave for 6ms, Speed variation 3.75m/s 3. Total 18 times (6 directions, 3 repetitions per direction).
Altitude	Standard: 30,000 Ft (Epoxy Sealed Controlled Environment) Optional: Hermetically Sealed (60,000 ft. 1.0 PSI min)
Hermetically Sealed (Optional)	MIL-STD-883 (For Hermetically Sealed Units)

Typical Performance Plots

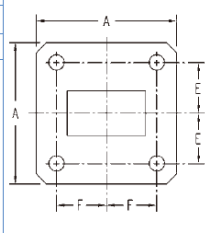
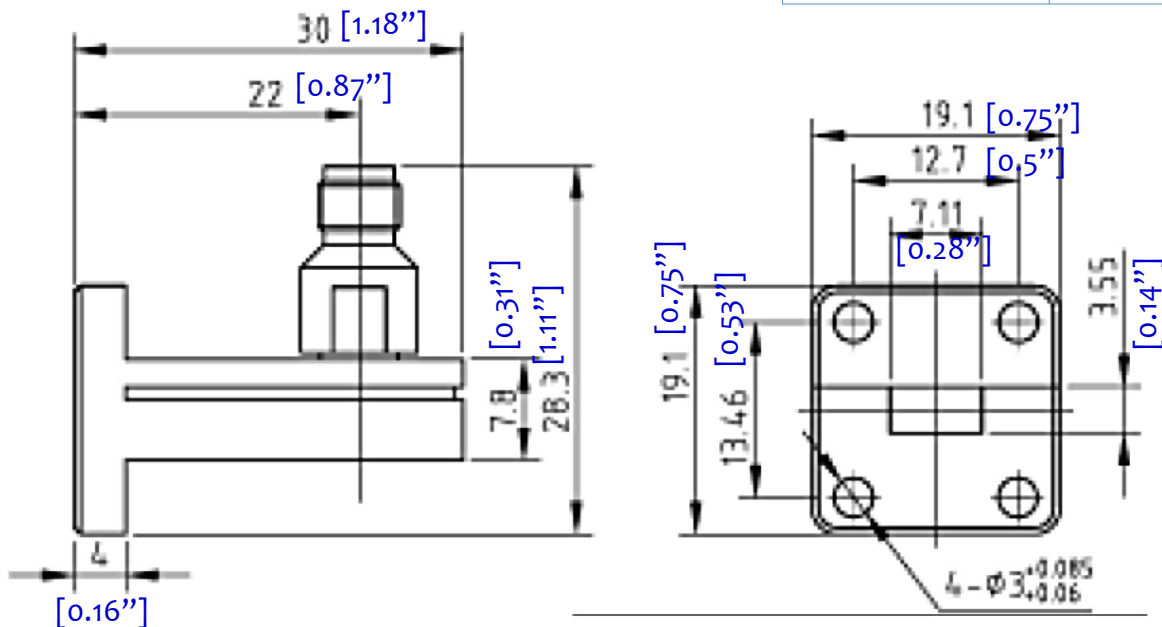


Mkr	Trace	X-Axis	Value	Notes
1 ▾	S11	33.2500 GHz	-40.69 dB	

Outline Drawing

Flange: UG599/U

	WR28	WG22	R320
	UG599/U		
Dimensions	inches	mm	
A	0.75	19.05	
E	0.265	6.73	
F	0.250	6.35	
Hole Dia.	0.116	2.98	

Notes:

1. Package Material: Aluminum Alloy
2. Plating: Oxidized (Chem Coat) or Polyurethane Liquid Coat Paint.
3. All dimensions are in millimeters [inches].

Additional Information

Documentation	Webpage
ESD Policy	https://rflambda.com/pdf/rflambda_esd_control.pdf
Connector Torque Specifications	https://www.rflambda.com/pdf/Torque_Specifications.pdf
Random Vibration Test Standard	https://www.rflambda.com/pdf/rflambda_random_vibration_MIL-STD-202G.pdf

Ordering Information

Part Number	Modification	Description
RFWA28E9F	Connectors 2.92mm-Female	26.5GHz-40GHz Full Band Waveguide Adapter

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