

## FEATURES

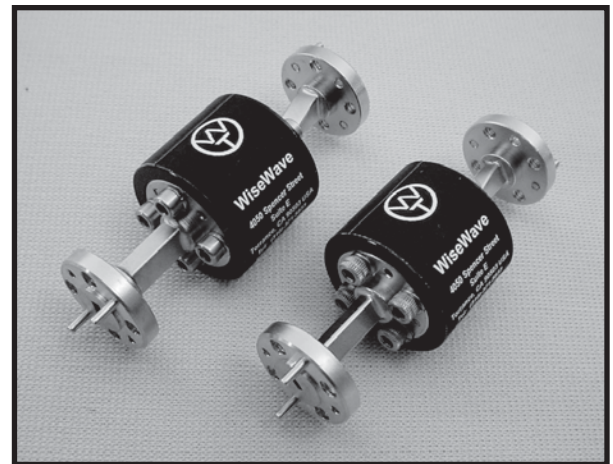
- ❖ Full waveguide band operation
- ❖ Faraday rotation type
- ❖ 18 to 110 GHz frequency range
- ❖ High Isolation

## APPLICATIONS

- ❖ Test setup
- ❖ Instrumentation
- ❖ Subsystems
- ❖ Transceivers

## DESCRIPTION

FFF series full band Faraday waveguide are available from 18 to 110 GHz frequency range in seven waveguide bands. The isolators feature moderate insertion loss and high isolation up to 30 dB for full waveguide bands operation. These devices are ideally suited for broadband communication systems or test instrument applications.

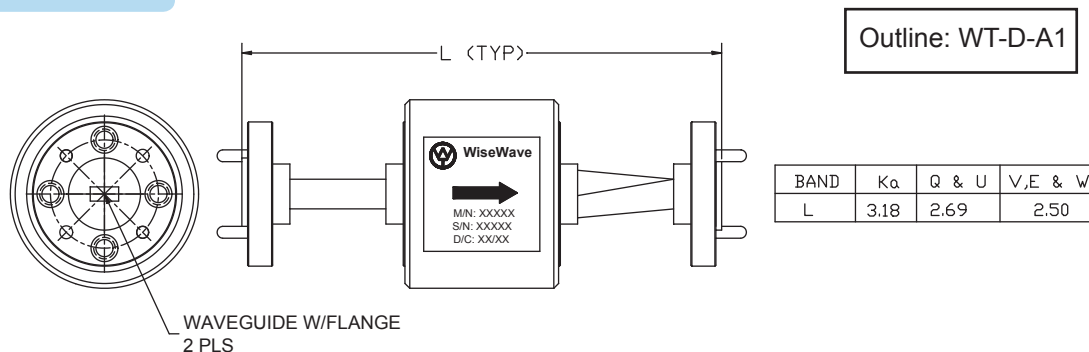


FFF Series

## SPECIFICATIONS

Frequency Band	K	Ka	Q	U	V	E	W
Model Number	FFF-42-01	FFF-28-01	FFF-22-01	FFF-19-01	FFF-15-01	FFF-12-01	FFF-10-01
Freq. Range (GHz)	18-26.5	26.5-40	33-50	40-60	50-75	60-90	75-110
Waveguide Size	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10
Insertion Loss (dB max)	1.0	1.2	1.5	1.6	1.8	2.0	2.3
Isolation (dB typ)	30	30	30	30	30	30	30
VSWR (max)	1.4:1	1.4:1	1.4:1	1.4:1	1.4:1	1.5:1	1.5:1
Power Handling (W)	2.0	2.0	1.5	1.5	1.0	1.0	1.0
Flange Type	UG595/U	UG599/U	UG383/U	UG383/U Mod	UG385/U	UG387/U	UG387/U Mod
Temperature Range	0 to +50°C						

## OUTLINE DRAWING



**Note:** The outline is subject to change without notice. Please confirm with factory if the outline is a critical issue to your design.

### WT-D-1 Drop-in Isolator

Freq. Range	DwG	W	L	H	H1	H2	H3	H4	V1	V2
0.8~1.2 GHz	A	1.00	1.25	0.27	0.09	0.82	NA	NA	0.09	0.82
1.2~2.4 GHz	B	1.00	1.00	0.47	0.09	0.82	0.09	0.82	0.09	0.82
2.0~3.5 GHz	B	0.71	0.98	0.39	0.16	0.39	0.10	NA	0.08	0.83
3.5~5.0 GHz	B	0.63	1.02	0.41	0.31	NA	0.08	0.47	0.09	0.54
5.0~8.0 GHz	B	0.47	0.79	0.37	0.08	0.31	0.08	0.31	0.08	0.63
8.0~18.0 GHz	A	0.35	0.59	0.31	0.06	0.24	NA	NA	0.06	0.47

*Dimensions are in inches*

### WT-D-2 Drop-in Circulator

Freq. Range	DwG	W	L	H	H1	H2	H3	H4	V1	V2
0.8~1.2 GHz	A	1.00	1.00	0.27	0.09	0.82	NA	NA	0.09	0.82
1.2~2.4 GHz	B	1.00	1.00	0.47	0.09	0.82	0.09	0.82	0.09	0.82
2.0~3.5 GHz	B	0.79	0.98	0.45	0.39	NA	0.14	0.51	0.06	0.83
3.5~5.0 GHz	B	0.63	0.87	0.41	0.31	NA	0.08	0.47	0.09	0.54
5.0~8.0 GHz	B	0.50	0.67	0.24	0.06	0.38	0.06	0.38	0.06	0.55
8.0~18.0 GHz	A	0.35	0.49	0.31	0.06	0.24	NA	NA	0.06	0.37

*Dimensions are in inches*

### WT-D-3 Coaxial Isolator

Freq. Range	W	L	H	V0	H01	H02	H1	H2	V1	V2
0.9~2.0 GHz	0.98	1.16	0.59	0.71	0.12	0.75	NA	NA	NA	NA
2.0~3.5 GHz	0.98	1.16	0.59	0.71	0.12	0.75	NA	NA	NA	NA
3.5~6.5 GHz	0.63	1.02	0.55	0.63	0.10	0.43	0.10	0.43	0.09	0.78
6.5~18.0 GHz	0.47	0.79	0.51	0.55	0.08	0.31	NA	NA	NA	NA

\*SMA(M) is available per request

*Dimensions are in inches*

### WT-D-4 Coaxial Circulator

Freq. Range	W	L	H	H1	H2	H3	H4	V1	V2
0.9~2.0 GHz	0.98	0.98	0.59	0.18	0.63	0.12	0.75	0.12	0.75
2.0~3.5 GHz	0.98	0.98	0.59	0.12	0.75	NA	NA	0.71	NA
3.5~6.5 GHz	0.63	0.83	0.55	NA	NA	NA	NA	NA	NA
6.5~18.0 GHz	0.59	0.75	0.51	0.16	0.28	0.12	0.35	0.12	0.47

\*SMA(M) is available per request

*Dimensions are in inches*

### WT-D-5 Junction Isolator

BAND	H	L	W
K	0.88	1.26	0.50
Ka	0.75	1.10	0.39
Q & U	1.18	1.26	0.59
V,E & W	0.85	1.00	0.75

*Dimensions are in inches*

### WT-D-6 Junction Circulator

BAND	H	L	W
K	0.88	1.06	0.94
Ka	0.75	0.94	0.83
Q	1.22	1.34	1.22
U	1.22	1.34	1.34
V,E & W	0.85	1.00	1.00

*Dimensions are in inches*

The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details. The outline drawings shown are standard versions. Contact factory for your specific package requirements.