

Differential Phase Shift Circulators

V3.00

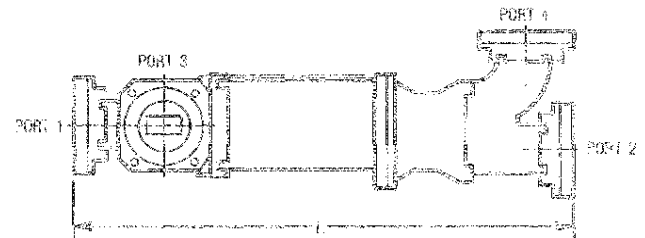
Features

- WR-284 TO WR-28
- Standard Mating Flanges

Mechanical Outline

Description

The differential phase shift circulators shown represent only a sampling of M/A-COM's product capability. Consult the factory for custom options such as direction of circulation, RFI shielding, magnetic shielding, frequency ranges, etc..



Specifications

Waveguide	Frequency (GHz)	Mating Flange	Isolation (dB.)		Insertion Loss (dB Max.)	VSWR Max.	Power		COOL Type	Length Inches	Circulator Model No.
			1-3	2-1			Peak ¹ (kW)	Avg ² (W)			
WR-284	2.7-2.9	CPR-284G	25	20	0.4	1.20	1000	5000	CONV	25.90	8H132-101
WR-284	2.7-2.9	CPR-284G	25	20	0.4	1.20	500	10000	LIQ	27.30	8H145-101
WR-284	2.7-2.9	CPR-284F	25	20	0.4	1.20	3000	20000	LIQ	38.80	8H150-101
WR-284	2.9-3.1	CPR-284G	25	20	0.4	1.20	500	10000	LIQ	27.30	8H145-102
WR-284	2.9-3.1	CPR-284F	25	20	0.4	1.20	3000	20000	LIQ	38.80	8H150-102
WR-284	3.1-3.5	CPR-284G	25	20	0.4	1.20	500	10000	LIQ	27.30	8H145-103
WR-284	3.1-3.5	CPR-284F	25	20	0.4	1.20	3000	20000	LIQ	38.80	8H150-103

Notes

1. Peak power handling capability will depend on pressurization, duty cycle, pulsewidth, load mismatch and altitude.
2. Average power handling capability may be increased by heat sinking, fins or liquid cooling.
3. High power circulators may be built with a load at port 4 for a duplexer function or loads at ports 3 and 4 for an isolator application. Reflected power into load must be specified.

Specifications Subject to Change Without Notice.

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Specifications

Waveguide	Frequency (GHz)	Mating Flange	Isolation (dB.)		Insertion Loss (dB Max.)	VSWR Max.	Power		COOL Type	Length Inches	Circulator Model No.
			1-3	2-1			Peak ¹ (kW)	Avg ² (W)			
WR-187	4.4-5.0	UG-148C	25	20	0.5	1.20	300	3000	CONV	22.00	8H24-101
WR-187	4.4-5.0	UG-148C	25	20	0.4	1.20	5000	5000	CONV	25.50	8H25-101
WR-187	4.4-5.0	UG-148C	25	20	0.4	1.20	400	10000	LIQ	25.50	8H183-101
WR-187	5.4-5.9	UG-148C	25	20	0.5	1.15	300	3000	CONV	22.00	8H24-102
WR-187	5.4-5.9	UG-148C	25	20	0.4	1.15	5000	5000	CONV	25.50	8H25-102
WR-187	5.4-5.9	UG-148C	25	20	0.4	1.15	4000	10000	LIQ	25.50	8H183-102
WR-159	5.85-6.425	CPR159F	23	20	0.2	1.10	CW0	15000	AIR	25.25	8H156-101
WR-137	5.9-6.4	CPR137F	25	20	0.25	1.15	50	1500	CONV	17.50	8H35-101
WR-112	7.5-8.5	UG-138	25	20	0.4	1.15	350	1000	CONV	14.25	8H41-101
WR-112	8.0-8.5	UG-138	25	20	0.4	1.15	350	1000	CONV	14.25	8H41-102
WR-112	8.5-9.6	UG-138	25	20	0.4	1.15	350	1000	CONV	11.62	8H51-101
WR-112	8.5-9.6	UG-138	25	20	0.3	1.15	10	3000	AIR	12.09	8H42-101
WR-112	8.5-9.6	UG-52B	25	20	0.4	1.15	1200	1500	LIQ	11.50	8H58-101
WR-112	9.0-10.0	UG-138	25	20	0.4	1.20	350	1000	CONV	11.62	8H51-103
WR-90	8.5-9.6	UG-135	25	20	0.4	1.15	300	500	CONV	8.50	8H62-101
WR-90	8.5-9.6	UG-136	25	20	0.25	1.15	30	2500	CONV	12.00	8H157-101
WR-90	8.5-9.6	UG-40B	25	20	0.4	1.15	250	5000	LIQ	11.85	8H176-101
WR-90	8.5-9.6	UG-136	25	20	0.25	1.15	250	10000	LIQ	17.00	8H184-101
WR-90	9.0-10.0	UG-135	25	20	0.4	1.20	300	500	CONV	8.50	8H62-102
WR-90	9.0-10.0	UG-136	25	20	0.3	1.20	30	2500	CONV	12.00	8H157-102
WR-90	9.0-10.0	UG-40B	25	20	0.4	1.20	250	5000	LIQ	11.85	8H176-102
WR-90	9.0-10.0	UG-136	25	20	0.3	1.20	250	10000	LIQ	17.00	8H184-102
WR-75	12.0-12.5	CPR-75F	25	20	0.3	1.15	10	3000	AIR	10.00	8H159-101
WR-75	14.0-14.5	CPR-75F	25	20	0.25	1.10	10	3000	AIR	10.00	8H159-102
WR-62	13.5-15.5	UG-1666	25	20	0.4	1.20	200	400	CONV	6.66	8H83-101
WR-62	13.5-15.5	UG-1666	25	20	0.3	1.20	10	2500	AIR	9.50	8H185-101
WR-62	15.5-17.5	UG-1666	25	20	0.4	1.20	200	400	CONV	6.66	8H83-102
WR-62	15.5-17.5	UG-1666	25	20	0.3	1.20	10	2500	AIR	9.50	8H185-102
WR-28	30.3-33.5	UG-599	20	20	0.5	1.25	100	100	CONV	4.90	8H94-101
WR-28	32.1-33.1	UG-599	25	20	0.5	1.15	100	3000	CONV	4.90	8H94-102
WR-28	33.0-36.0	UG-599	20	20	0.5	1.20	100	100	CONV	4.90	8H94-103
WR-28	34.5-36.5	UG-599	20	20	0.5	1.20	100	100	CONV	4.90	8H94-104
WR-28	34.5-36.5	UG-600	25	20	0.5	1.15	10	1200	CONV	4.90	8H182-101

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