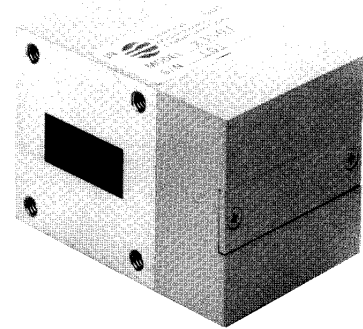


# Waveguide Products

## STANDARD ISOLATORS AND CIRCULATORS

MODEL NUMBER	FREQUENCY [GHz]	WR	FLANGE	ISOLATION [dB MIN]	INS. LOSS [dB MAX]	VSWR [MAX]	SIZE, INCHES (ISOLATOR)
S350 (*)	2.70-2.90	284	CMR284	25	0.30	1.15:1	5.50 7.50 2.40
S351 (*)	2.90-3.10	284	CPR284F	25	0.30	1.15:1	5.50 7.50 3.00
S352 (*)	3.10-3.50	284	CPR284F	23	0.30	1.15:1	5.50 7.50 3.00
A350 (*)	3.70-4.20	229	CMR229	25	0.20	1.15:1	4.80 5.20 2.80
G350 (*)	4.40-5.00	187	CMR187	23	0.20	1.15:1	4.00 4.75 1.80
B350 (*)	5.90-6.40	159	CMR159	23	0.20	1.15:1	3.50 4.00 2.40
J350 (*)	6.50-7.10	137	UG441/U	23	0.20	1.15:1	3.13 4.00 3.10
H350 (*)	7.20-8.40	112	UG138/U	23	0.20	1.15:1	1.88 3.25 1.90
X350 (*)	8.50-9.60	90	UG135/U	23	0.20	1.15:1	1.63 2.38 1.60
X351 (*)	9.00-10.0	90	UG135/U	23	0.20	1.15:1	1.63 2.38 1.60
M350 (*)	10.7-11.7	75	WR75	23	0.20	1.15:1	1.50 2.25 1.50
M351 (*)	10.7-13.2	75	WR75	20	0.30	1.20:1	1.50 2.25 1.50
M352 (*)	11.7-13.2	75	WR75	20	0.30	1.20:1	1.50 2.25 1.50
P350 (*)	13.5-15.5	62	UG1665/U	20	0.30	1.20:1	1.31 2.13 1.30
P351 (*)	14.0-14.5	62	UG1665/U	25	0.25	1.12:1	1.31 2.13 1.30
P352 (*)	17.7-19.7	51	WR51	20	0.30	1.20:1	1.31 2.19 1.30
K350 (*)	21.0-23.0	42	UG597/U	20	0.30	1.20:1	0.88 1.50 0.88
R350 (*)	26.5-30.0	28	UG599/U	20	0.40	1.20:1	0.75 1.25 0.75
R351 (*)	34.5-36.5	28	UG599/U	20	0.40	1.20:1	0.75 1.25 0.75
Q350 (*)	39.0-41.9	22	UG383/U	20	0.50	1.20:1	1.13 1.44 1.10
U350 (*)	41.5-42.5	19	UG383/U	20	0.50	1.20:1	1.13 1.44 1.10

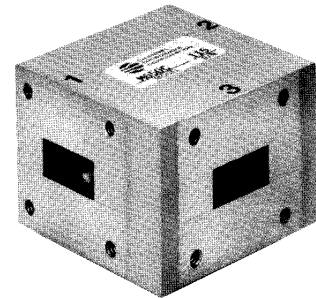
NOTE: (\*) Add unit designation "C" for circulator (i.e. M350 C) or "I" for isolator (i.e. M350 I).



## FULL-BAND ISOLATORS AND CIRCULATORS

MODEL NUMBER	FREQUENCY [GHz]	ISOLATION [dB MIN]	INS. LOSS [dB MAX]	VSWR [MAX]	FLANGE TYPE MIL-F-3922	SIZE (CIRCULATOR)
H650 (*)	7.05-10.00	18	0.4	1.30:1	UG 138/U	2.25 3.25 1.90
X650 (*)	8.00-12.40	18	0.4	1.30:1	UG135/U	2.00 2.38 1.60
M650 (*)	10.00-15.00	18	0.4	1.30:1	WR75	1.75 2.25 1.50
P650 (*)	12.40-18.00	18	0.4	1.30:1	UG1665/U	1.50 2.19 1.30
K650 (*)	18.00-26.50	18	0.4	1.30:1	UG597/U	1.00 1.50 0.88
R650 (*)	26.50-40.00	16	0.5	1.40:1	UG599/U	0.75 1.25 0.75

NOTE: (\*) Add unit designation "C" for circulator (i.e. M650C) or "I" for isolator (i.e. M650I).



## MINIATURE ISOLATORS

MODEL NUMBER (1)	BAND [GHz]	% BANDWIDTH	ISOLATION [MIN]	INSERTION LOSS [MAX]	VSWR [MAX]	FLANGE TYPE	THICKNESS, INCHES	
SH1XX	H	7.05-10.00	1%	25	0.40	1.20:1	UG138/U	0.620
			2%	20	0.50	1.30:1		
SX1XX	X	8.20-12.40	1%	23	0.40	1.20:1	UG135/U	0.500
			2%	20	0.50	1.25:1		
SM1XX	M	10.00-15.00	1%	25	0.30	1.20:1	WR75 (2)	0.500
			2%	20	0.40	1.25:1		
SP1XX	P	12.40-18.00	1%	20	0.40	1.25:1	UG1665/U	0.500
			2%	18	0.40	1.30:1		
SK1XX	K	18.00-26.50	1%	18	0.40	1.30:1	UG597/U	0.500
			2%	17	0.50	1.35:1		

Additional Specifications:

Operating Temperature Range: 0° to 50 °C Typical

RF Power: Forward — 1 KW Peak; 10 Watts Forward — 2 Watts Reverse

(1) A unique model number is assigned upon customer frequency designation.

(2) All units can be ordered with choke flanges.

(3) UNC—2B threads are standard. Clearance holes are optional.

