

**JMC1200T**

Flexible and Twistable Waveguide

JMC1200N

Flexible Non Twistable Waveguide

Flexible and Twistable Waveguide

Flexible and twistable rectangular waveguides are used in a wide variety of satcom, VSAT and telecom applications that carry high frequency radio (microwave communications) signals. Flexible waveguides are manufactured from helically wound silver plated copper alloy strip material which allows the waveguides to twist and bend in the E and H planes simultaneously.

The flexible waveguide core is protected from the environment by a molded neoprene rubber jacket providing durability and full axis of motion over the operating temperature range of -20 to +100 degrees Celsius.

Electrical Specifications

Add 0.03 to VSWR for Choke flanges

Electrical performance can be optimized over narrower frequency bands

Waveguide Size		Frequency	Insertion loss	VSWR		Power Rating	
IEC R	EIA WR	Operating GHz	Maximum dB/ft. (m)	Maximum <36 in. (1 m)	Maximum >36 in. (1 m)	JMC1200T Watts	JMC1200N Watts
70	137	5.85-8.20	0.06 (0.20)	1.07	1.11	1700	2000
84	112	7.05-10.00	0.07 (0.23)	1.09	1.12	1200	1500
100	90	8.20-12.40	0.09 (0.30)	1.09	1.12	700	1000
120	75	10.00-15.00	0.13 (0.43)	1.10	1.12	500	750
140	62	12.40-18.00	0.16 (0.52)	1.12	1.15	220	400
220	42	18.00-26.50	0.38 (1.25)	1.20	1.25	100	150
260	34	22.00-33.00	0.46 (1.50)	1.22	1.26	85	110
320	28	26.50-40.00	0.61 (2.00)	1.32	1.37	75	90

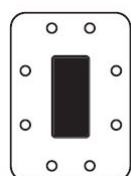
Mechanical Specifications

Waveguide Size		Bending Radius Rating Minimum for JMC1200T or JMC1200N				Twisting Rating Maximum for JMC1200T		Length Tolerance	Internal Pressure Rating Maximum
IEC R	EIA WR	Static		Repeated		Static	Repeated	Static	Static
		E-Plane In. (mm)	H-Plane In. (mm)	E-Plane In. (mm)	H-Plane In. (mm)	+/- Deg. /ft (m)	+/- Deg. /ft (m)	+/- inches/foot (%)	PSIG (kPa)
70	137	4.0 (102)	8.0 (203)	16 (406)	32 (813)	64 (210)	16 (52)	0.13 (1%)	30 (207)
84	112	3.0 (76)	6.0 (152)	12 (305)	24 (610)	79 (259)	20 (66)	0.13 (1%)	35 (242)
100	90	2.5 (64)	5.0 (127)	10 (254)	20 (508)	96 (315)	23 (75)	0.13 (1%)	45 (311)
120	75	2.1 (51)	4.2 (102)	8.5 (216)	17 (432)	112 (364)	28 (92)	0.13 (1%)	45 (311)
140	62	1.8 (46)	3.6 (92)	7.0 (178)	14 (368)	136 (446)	34 (112)	0.13 (1%)	45 (311)
220	42	1.2 (30)	2.3 (60)	4.7 (120)	11 (240)	160 (525)	44 (144)	0.13 (1%)	45 (311)
260	34	1.0 (24)	1.9 (48)	3.8 (96)	7.6 (192)	192 (630)	48 (157)	0.13 (1%)	45 (311)
320	28	0.8 (20)	1.6 (40)	3.2 (80)	6.3 (160)	280 (920)	70 (230)	0.13 (1%)	45 (311)

Waveguide Flanges

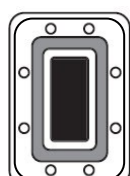
Brass and aluminum waveguide flanges are manufactured in-house and maintained in inventory reducing product lead time so we can respond quickly to market demands. Both North American (EIA) and European (IEC) standard waveguide flanges are available in corrosion protected base metal or plated finishes.

Rectangular Flanges



FLAT
Contact

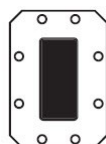
CPR -02
UDR -22



GROOVED
Contact

CPRG -01
PDR -21

Number of holes
for some flange
styles depends on
waveguide size

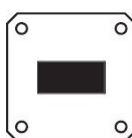


MINIATURE
Contact

CMR -09,10,11
UER -30

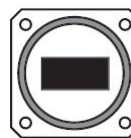
Square Flanges

WR42 to WR112 / R70 to R220



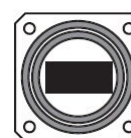
FLAT

COVER -03
UBR -23



GROOVED

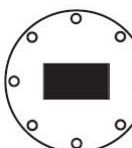
COVER -04
PBR -24



CHOKE -05
CBR -25

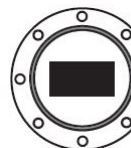
Round Flanges

WR137 / R70



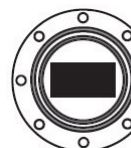
FLAT

COVER -06
UAR -26



GROOVED

COVER -07
PAR -27



CHOKE -08
CAR -28

Accessories

Hardware, fixing and clamping kit accessories are available for use with our flexible waveguide products.

Part Number Guide

JMC1200T		-08	-36	IN	-N	-03	-04	-R
Flex Type			Flex Length					
Flex Twist	JMC1200T		Unit Length					Flange Finish
Flex Non Twist	JMC1200N		inch	IN				-S Silver Plated
			mm	MM				-N Nickel Plated
			Jacket Type					-T Tin Plated
			Neoprene	-N				-G Gold Plated
			Silicone	-S				-R Iridite
	Waveguide Size				Flange Type		Flange Type	
	R70 / WR137	-05			CPRG - Grooved Contact	-01	-21	PDR - Rectangular Grooved
	R84 / WR112	-06			CPRF - Contact Flat	-02	-22	UDR - Rectangular Flat
	R100 / WR90	-07			Cover Flat - Square	-03	-23	UBR - Square Flat
	R120 / WR75	-08			Cover Grooved - Square	-04	-24	PBR - Square Grooved
	R140 / WR62	-09			Choke - Square	-05	-25	CBR - Square Choke
	R220 / WR42	-11			Cover F WR137 - Round	-06	-26	UAR70 - Round Plain
	R260 / WR34	-12			Cover G WR137 - Round	-07	-27	PAR70 - Round Grooved
	R320 / WR28	-13			Choke WR137 - Round	-08	-28	CAR70 - Round Choke
					CMR - Standard Holes	-09		
					CMR - Clear Holes	-10	-30	UER - Clear Holes
					CMR - Tapped Holes	-11	-99	Special - Customer Specified

Standard

Neoprene Rubber Jacket with Brass Flanges

Special Request

Silicone Rubber: Jacket: Type -S

Aluminium Flanges: Add "A" to flange dash number