High Power Terminations Series 101

Model 18101-1500-CH10 UBR140

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Features

- 0.32 GHz to 330 GHz
- Industry leading performance
- Low VSWR over full waveguide range
- Sealed, 15 psig Standard
- Models up to 10 kW Applications
- System Dummy Loads
- HPA Testing

Please note the tables below detail Flann standard high power terminations that are available from stock or on short delivery. Other models with alternative power handling or body styles are also available - please contact our Sales Team for product assistance.

Natural Convection High Power Range up to 300 Watts

Model	Frequency Range (GHz)	Waveguide			Maximum Power Mean / CW (Watts)		Maximum VSWR	Dimensions (mm)		
		WG	R	WR	Natural Convection	Forced Air (3 m/s)		L	BX	AX
10101-150-CN0	2.60 - 3.95	10	32	284	150	220	1.08	247	38.1	76.2
10101-200-CV1					200	300	1.08	273	80.4	84
11A101-125-CN0	3.22 □ 4.90	11A	40	229	125	180	1.08	205	32.3	61.4
11A101-200-CV1					200	300	1.08	243	75.5	84
12101-100-CN0	3.94 □ 5.99	12	48	187	100	150	1.08	170	25.4	50.8
12101-300-CH3					300	450	1.08	170	63	88.9
13101-75-CN0	4.64 □ 7.05	13	58	159	75	110	1.08	140	23.4	43.6
13101-250-CH3					250	370	1.08	140	62.7	81.8
14101-55-CN0	5.38 □ 8.2	14	70	137	55	80	1.08	120	19.1	38.1
14101-300-CH1					300	450	1.08	173	122.2	120

15101-40-CN0	6.58 ⧠ 10.0	15	84	112	40	60	1.08	106	15.6	31.8
15101-250-CH1					250	370	1.08	131	119	94
16101-27-CN0	8.20 ⧠ 12.5	16	100	90	27	40	1.08	82	12.7	25.4
16101-240-CV1					240	360	1.08	240	81	84
17101-19-CN0	9.84 ⧠ 15.0	17	120	75	19	28	1.08	63.5	12.1	21.6
17101-300-CH1					300	450	1.08	240	121.8	45
18101-19-CN0	11.9 ⧠ 18.5	18	140	62	19	28	1.08	76	9.9	17.8
18101-275-CH1					275	410	1.08	240	113	40
19101-14-CN0	14.5 - 22.0	19	180	51	14	21	1.08	62	8.5	15
19101-275-CH1					275	410	1.08	240	117	40
20101-11-CN0	17.6 ⧠ 26.7	20	220	42	11	16	1.08	58	6.4	12.7
20101-250-CH1					250	375	1.07	237	106	35
21101-9-CN0	21.7 ⧠ 33.0	21	260	34	9	13	1.08	52	6.4	10.7
21101-250-CH1					250	375	1.07	237	106	35

22101-7-CN0	26.4 □ 40.1	22	320	28	7	10	1.08	47	5.6	9.1
22101-250-CH1					250	375	1.08	127	119	81
23101-6-CN0	33.0 □ 50.1	23	400	22	6	9	1.08	45	4.9	7.7
23101-250-CV1					250	375	1.08	127	68.5	138

General Specifications

Maximum Power is Mean /CW Non shedding ceramic elements.

Low out-gassing (load element total mass loss < 1.0%, collected volatile condensable materials < 0.10%)

Natural Convection

Terminations incorporating heat sinks are orientation sensitive due to the direction of air flow over the heat sink. Flann model number includes a ‘V’ or ‘H’ code to differentiate which is the recommeded orientation. It should be noted that the waveguide broad wall should be vertical in the ‘H’ configuration.

Forced Air

Where stated the standard natural convection design can be used at 1.5 times its rated power with forced air cooling; 3 m/s velocity over all heatsink surfaces.

Blown Version (Fan Assisted) details on request

Liquid Cooled (Water, Oil, Glycol) details on request

Natural Convection Very High Power Range up to 1.5 kWatts

Model	Frequency Range (GHz)	Waveguide			Maximum Power Mean / CW (Watts)		Maximum VSWR	Dimensions (mm)		
		WG	R	WR	Natural Convection	Forced Air (3 m/s)		L	BX	AX
10101-600-CV1	2.60 ⧠ 3.95	10	32	284	600	900	1.08	273	124.4	200
11A101-1500-CH1	3.22 ⧠ 4.90	11A	40	229	1500	2250	1.1	438	154	198
12101-1500-CH1	3.94 ⧠ 5.99	12	48	187	1500	2250	1.1	438	147	198
13101-1500-CH1	4.64 ⧠ 7.05	13	58	159	1500	2250	1.09	438	145.5	198
14101-1500-CH1	5.38 ⧠ 8.2	14	70	137	1500	2250	1.08	438	132.8	198
15101-1500-CH2	6.58 ⧠ 10.0	15	84	112	1500	2250	1.1	247	215.5	161
16101-1500-CH1	8.20 ⧠ 12.5	16	100	90	1500	2250	1.08	415	125	198
17101-1500-CH2	9.84 ⧠ 15.0	17	120	75	1500	2250	1.07	415	205.8	92
18101-1500-CV2	11.9 ⧠ 18.5	18	140	62	1500	2250	1.07	430	233	90
19101-1500-CV2	14.5 - 22.0	19	180	51	1500	2250	1.07	430	233	90

20101-1000-CV2	17.6 □ 26.7	20	220	42	1000	1500	1.07	237	222	90
21101-1000-CV2	21.7 □ 33.0	21	260	34	1000	1500	1.07	237	222	90
22101-1000-CV2	26.4 □ 40.1	22	320	28	1000	1500	1.08	237	219	90
23101-500-CV2	33.0 □ 50.1	23	400	22	500	750	1.08	127	218.5	90

Natural Convection High Power Range up to 300 Watts

Model 17101-1500-CH20 UBR120

Natural Convection Ultra High Power Range up to 10.0 kWatts

Model	Frequency Range (GHz)	Waveguide			Maximum Power Mean / CW (Watts)		Maximum VSWR	Dimensions (mm)		
		WG	R	WR	Natural Convection	Forced Air (3 m/s)		L	BX	AX
11A101-4000-CH2	3.22 – 4.90	11A	40	229	4000	6000	1.1	438	238	278
12101-3800-CH2	3.94 – 5.99	12	48	187	3800	5700	1.1	438	231	262
13101-3700-CH2	4.64 – 7.05	13	58	159	3700	5500	1.09	438	229.5	253
14101-3600-CH2	5.38 – 8.2	14	70	137	3600	5400	1.08	438	216.8	246
15101-3400-CH2	6.58 – 10.0	15	84	112	3400	5100	1.08	422	215.5	229
16101-3200-CH2	8.20 – 12.5	16	100	90	3200	4800	1.08	415	209	214
17101-2900-CH2	9.84 – 15.0	17	120	75	2900	4350	1.07	415	205.8	191
18101-2700-CH2	11.9 – 18.5	18	140	62	2700	4000	1.07	415	201	176
19101-2500-CH2	14.5 - 22.0	19	180	51	2500	3750	1.07	415	201	161

TML (Total Mass Loss) < 1%
CVCM (Collected Volatile Condensable Mass) < 0.1%

ORDERING INFORMATION: - BASIC OPTIONS

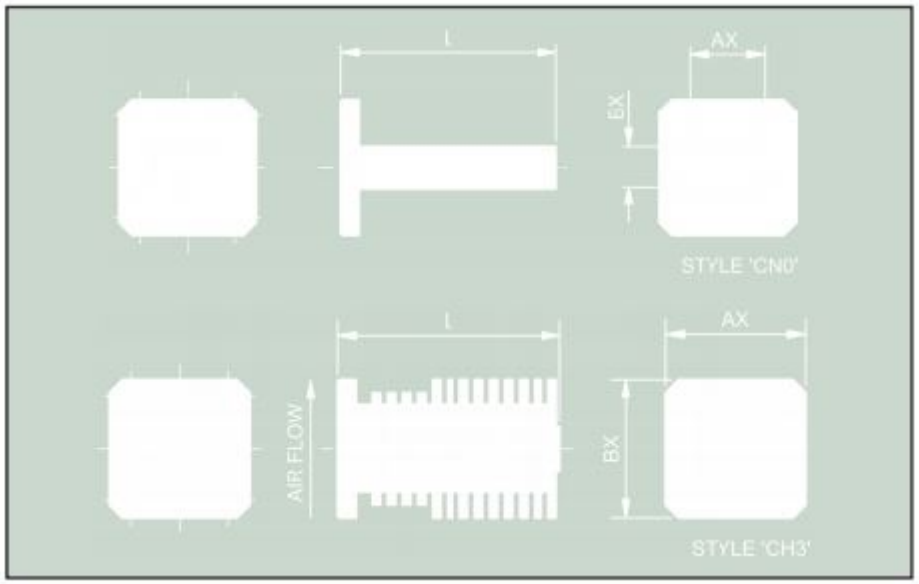
Model Description: Waveguide WG15, 1500 Watts, PBR 84 Flange	Model Number:
Waveguide: WG Waveguide Designation	15
Series: 101	101
Power: Maximum Power Handling (Watts)*	-1500
Cooling Style: C = Convection, F = Integral Fan, L = Liquid, P = Plate/Heatpipe	-C
Preferred Orientation: N = None, H = Horizontal, V = Vertical	H
Heat Sink Style: 0 = No Fins, 1 = Single, 2 = Double, 3 = Peripheral	2
Other Options: 0 = Standard	0

Flange Type: For standard flange types and recommendations see page 111 onwards PBR84

* Dependent on Cooling / Heat Sink Style and orientation. Please contact the Sales Team for other standard values

Vertical Orientation

Horizontal Orientation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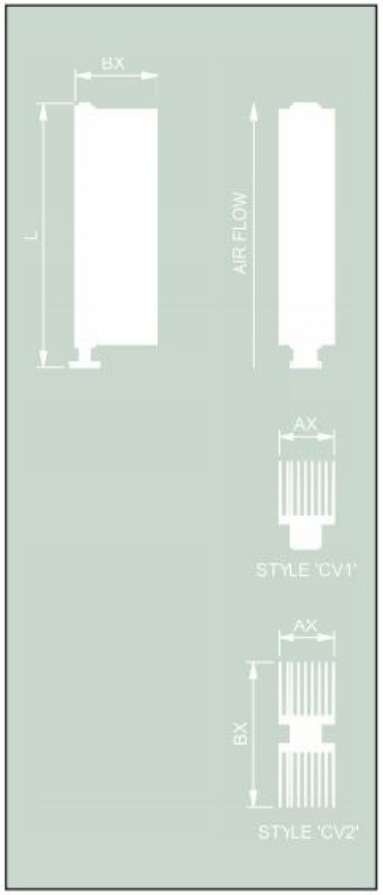
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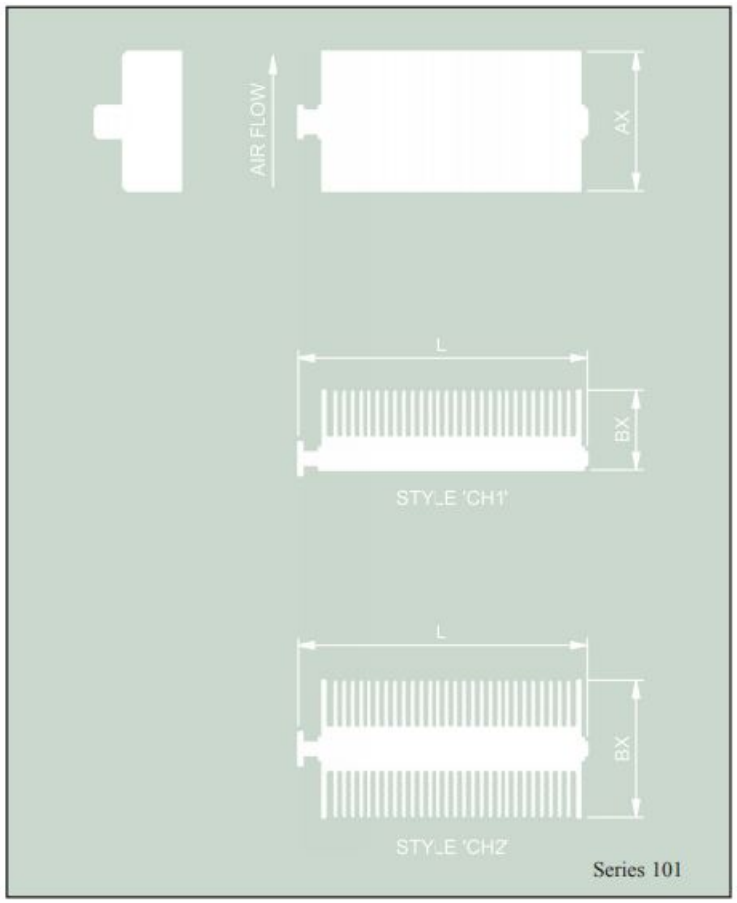
AIR FLOW
AX
L
BX
STYLE 'CH1'
L
BX
STYLE 'CH2'
Series 101