



WAVEGUIDE WR42 DUPLEXER

RX: 18.167-18.677GHz

TX: 19.177-19.687 GHz

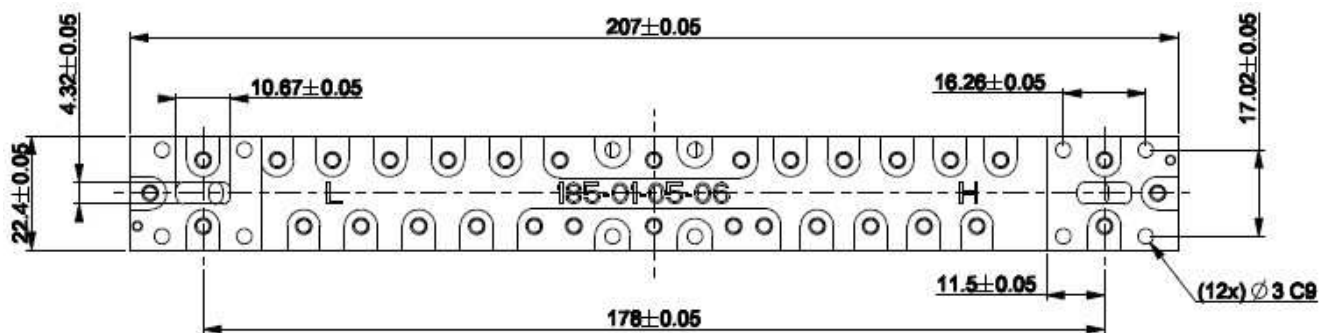
- Compact size and high power handle
- Very high rejection outdoor unit
- Compatible with ITU Standard
- Different frequency and flange available upon request
- Storage temperature -40~+80°C
- Operational Temperature: -30~+70 °C
- Operating Humidity: 0~90% relative
- Material: Aluminum
- Body finish : 2~3µm Ag plated
- Tchebyscheff Response
- Mechanical Test ETS 300-019-1-3 class 3.3

Electrical Specification

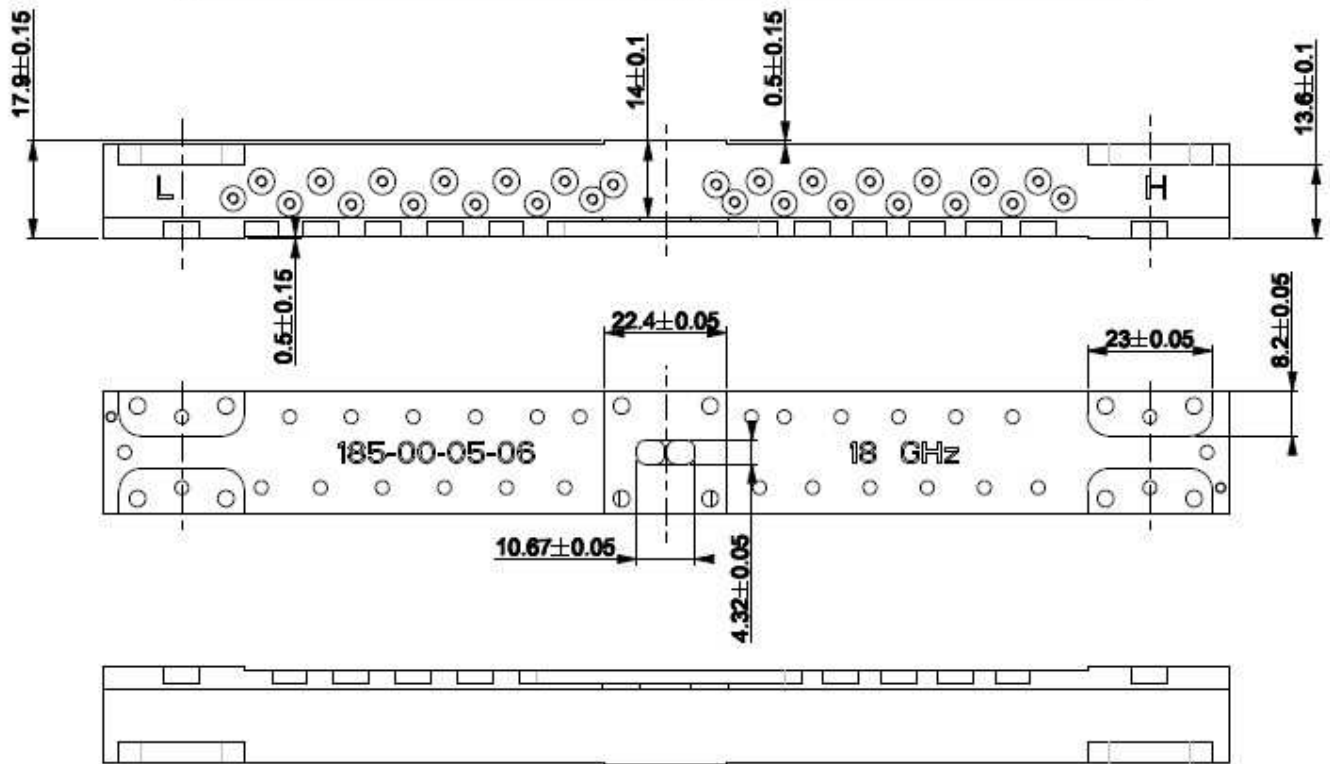
Frequency Range:	RX: 17.156-17.184GHz TX: 17.272-17.300GHz
Insertion Loss:	CH1: 1.5dB max CH2: 1.5dB max
Pass band Ripple:	0.65dB maximum
Power Handle:	200W
Isolation between port:	55dB
Flange:	WR42 CPRF
Impedance:	50 Ω

Environmental Specification

Humidity: According to ETS 300-019-1-3 class 3.3 (par. To 5.1 “climatic conditions”)



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The following TX and RX channel available upon request.

EXT	Tx Frequency range		Rx Frequency range		Bandwidth [MHz]		Shifter [MHz]
	Fstart [MHz]	Fstop [MHz]	Fstart [MHz]	Fstop [MHz]	Low band	High band	
	FL1	FL2	FH1	FH2			
L1	17700,0	18223,0	18700,0	19233,0	523,0	533,0	1010
L2	18162,0	18700,0	19162,0	19700,0	538,0	538,0	1010
L6	17706,0	18182,0	18716,0	19192,0	476,0	476,0	1010
L7	18167,0	18677,0	19177,0	19687,0	510,0	510,0	1010
L8	17700,0	18223,0	18700,0	19233,0	523,0	533,0	1008
L9	18162,0	18700,0	19162,0	19700,0	538,0	538,0	1008
L10	17706,0	18182,0	18716,0	19192,0	476,0	476,0	1008
L11	18167,0	18677,0	19177,0	19687,0	510,0	510,0	1008

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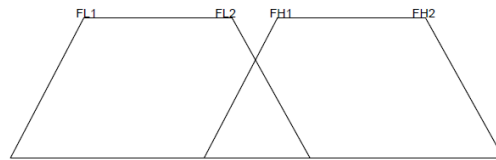


Fig.1 Frequency Diagram Attenuation

ISOLATION

- Isolation in band (iso in) [Port 1 to the Port under test] > 65 dB typical
- Isolation in band (iso in) [Port 1 to the Port under test] > 65 dB in temperature
- Isolation out band (iso out) [Port 1 to the Port under test] > 40 dB

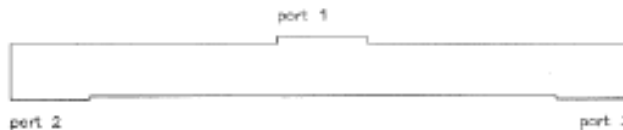


Fig.1 Port Description

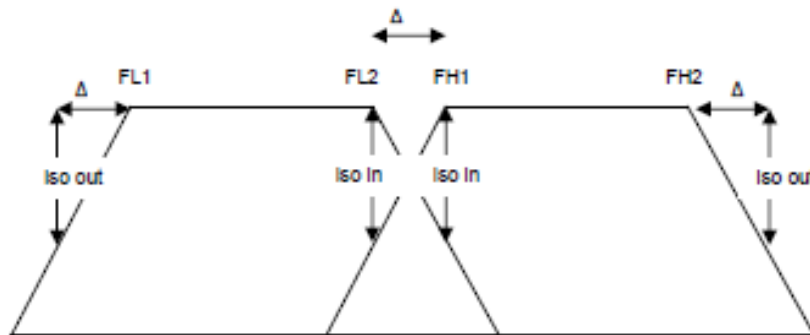


Fig.2 Frequency Diagram Isolation

Isolation port2 - port3

With the port 1 terminated with a load see Fig.3:

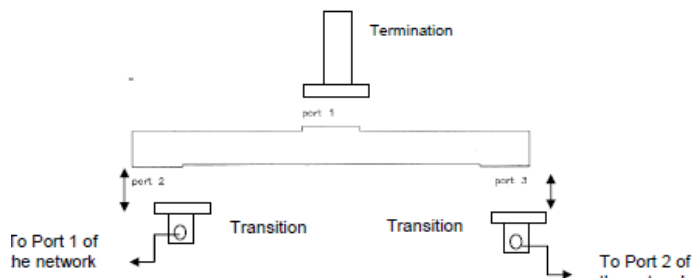


Fig.3 Isolation port 2 - port 3 setting

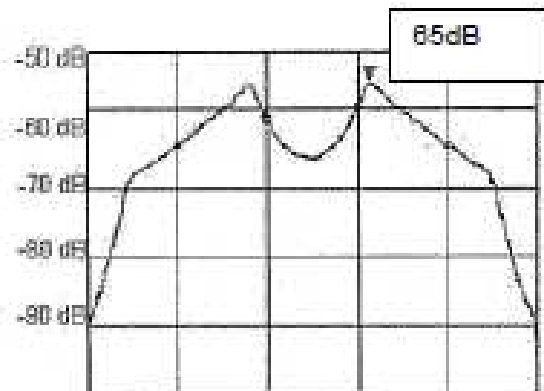


Fig.4 Isolation diagram

Isolation Port 2 - Port 3 > 65dB
See Fig. 4 for typical diagram of this measure