



WAVEGUIDE WR51 DUPLEXER

RX: 17.156-17.184GHz

TX: 17.272-17.300 GHz

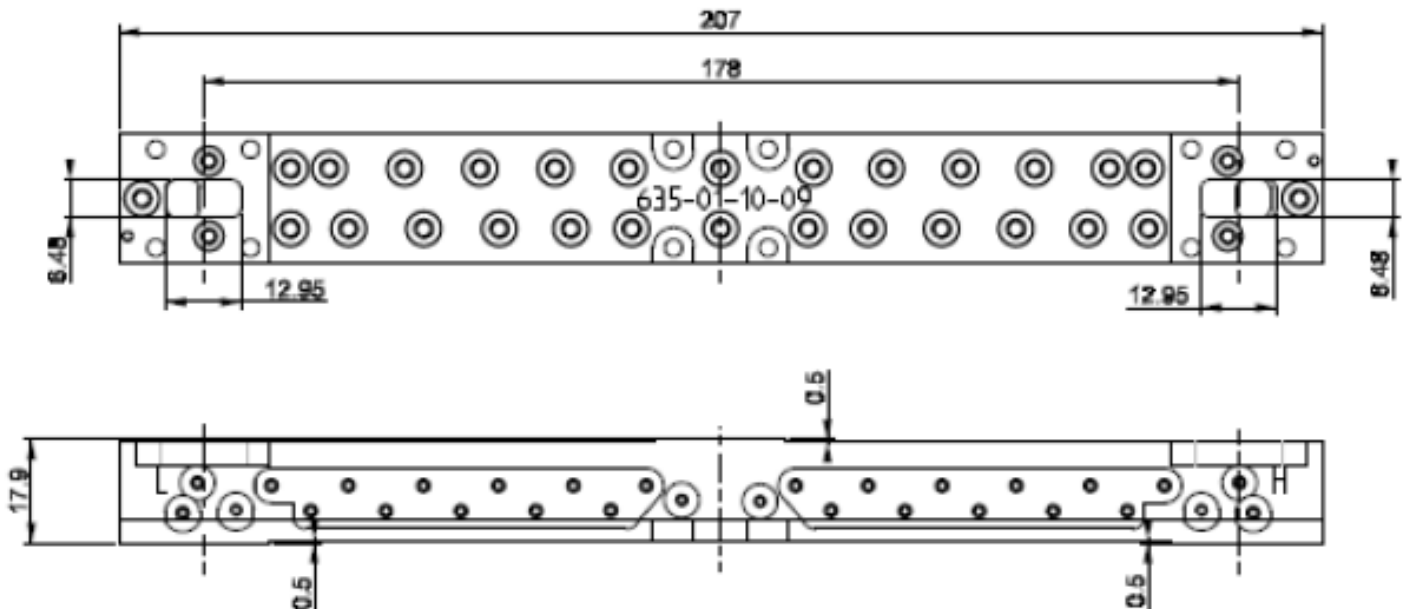
- Compact size and high power handle
- Very high rejection outdoor unit
- Compatible with ITU Standard
- Different frequency and flange available upon request
- Storage temperature -40~+80°C
- Operational Temperature: -30~+70 °C
- Operating Humidity: 0~90% relative
- Material: Aluminum
- Body finish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

Electrical Specification

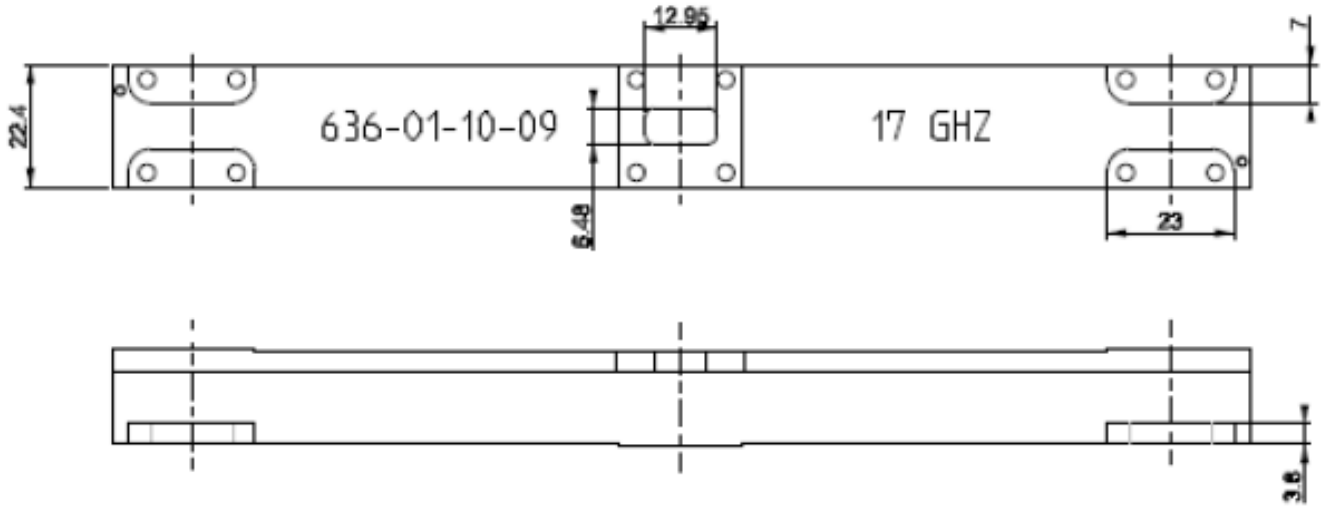
Frequency Range:	RX: 17.156-17.184GHz TX: 17.272-17.300GHz
Insertion Loss:	CH1: 2.5dB max CH2: 2.5dB max
Pass band Ripple:	0.5dB maximum
Power Handle:	200W
Isolation between port:	55dB
Flange:	WR51 CPRF
Impedance:	50 Ω

Environmental Specification

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



WAVEGUIDE WR51 DUPLEXER 17.156-17.184GHZ AND 17.272-17.300GHZ



The following TX and RX channel available upon request.

Tx Frequency range		Rx Frequency range		Bandwidth [MHz]		Shifter [MHz]	Isolation
Fstart [MHz]	Fstop [MHz]	Fstart [MHz]	Fstop [MHz]	Low band	High band		
FL1	FL2	FH1	FH2				
17100	17128	17216	17244	28,0	28,0	116	>55
17128	17156	17244	17272	28,0	28,0	116	>55
17156	17184	17272	17300	28,0	28,0	116	>55
FH1	FH2	FL1	FL2				
17216	17244	17100	17128	28,0	28,0	116	>55
17244	17272	17128	17156	28,0	28,0	116	>55
17272	17300	17156	17184	28,0	28,0	116	>55
FL1	FL2	FH1	FH2				
17100	17156	17244	17300	56,0	56,0	144	>60
FH1	FH2	FL1	FL2				
17244	17300	17100	17156	56,0	56,0	144	>60

WAVEGUIDE WR51 DUPLEXER 17.156-17.184GHZ AND 17.272-17.300GHZ

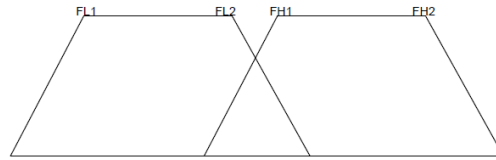


Fig.1 Frequency Diagram Attenuation

ISOLATION

Isolation in band (iso in) [Port 1 to the Port under test] > 55dB BW28 ; 60 dB BW56 (whole T³ range)
 Isolation out band (iso out) [Port 1 to the Port under test] > 40 dB (whole T³ range)

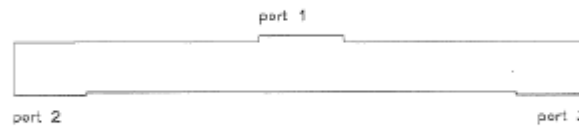


Fig.2 Port Description

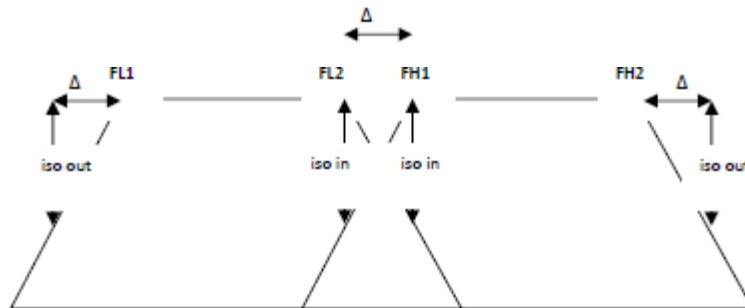


Fig.3 Frequency Diagram Isolation

Isolation port2 - port3

With the port 1 terminated with a load see Fig.4

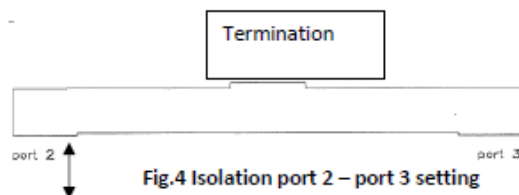


Fig.4 Isolation port 2 - port 3 setting

Isolation Port 2 - Port 3 >see table 1 dB
 See Fig. 5 for typical diagram of this measure

