WAVEGUIDE WR42 DUPLEXER
RX: 24.056-24.084GHz
TX: 24.222-24.250 GHz

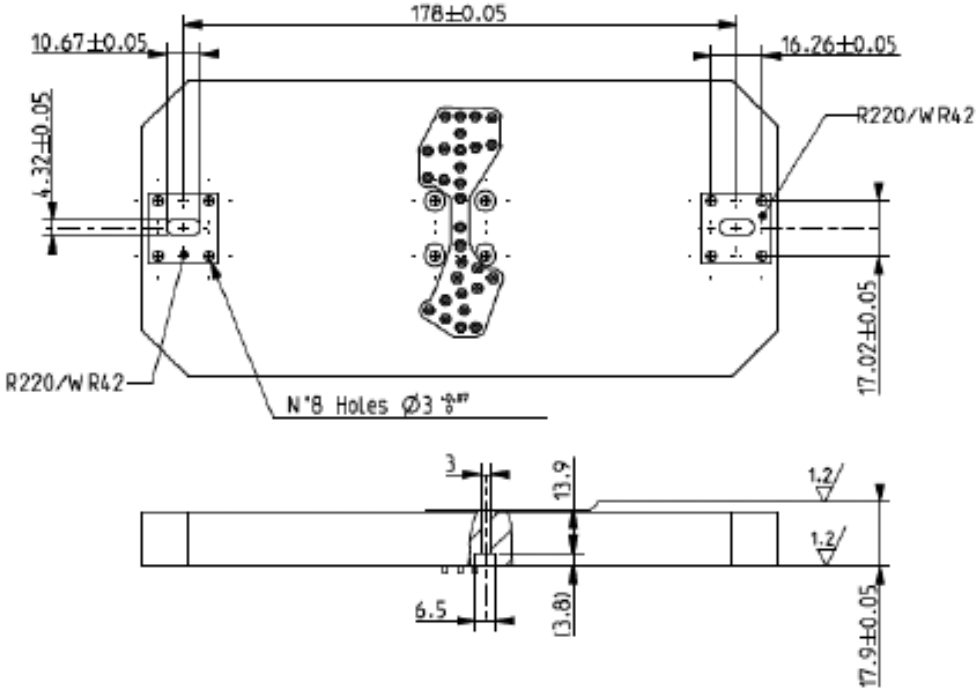
- Compact size and high power handle
- Very high rejection outdoor unit
- Compatible with ITU Standard
- Different frequency and flange available upon request
- Storage temperature -40~+80℃
- Operational Temperature: -30~+70 ℃
- Operating Humidity: 0~90% relative
- Material: Aluminum
- Body finish :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

Electrical Specification

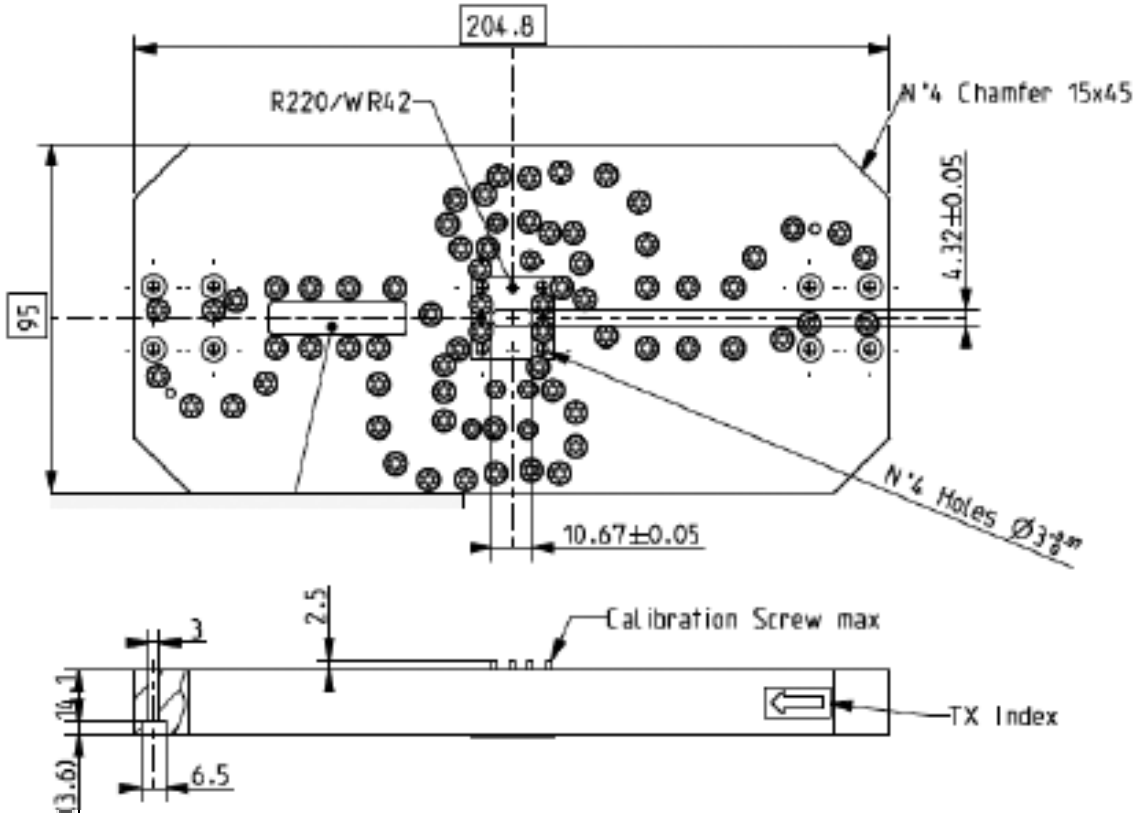
Frequency Range:	RX: 24.056-24.084GHz
	TX: 24.222-24.250GHz
Insertion Loss:	CH1: 1.5dB max
	CH2: 1.5dB max
Pass band Ripple:	0.65dB maximum
Power Handle:	200W
Isolation between port:	55dB
Flange:	WR42 CPRF
Impedance:	50 Ω

Environmental Specification

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



WAVEGUIDE WR42 DUPLEXER 24.056-24.084GHz AND 24.222-24.250GHz



The following TX and RX channel available upon request.

Tx Frequency range		Rx Frequency range		Bandwidth [MHz]		Shifter [MHz]	Isola -tion TX/RX [dB]
Fstart [MHz]	Fstop [MHz]	Fstart [MHz]	Fstop [MHz]	Low band	High band		
FL1	FL2	FH1	FH2				
24000,0	24028,0	24166,0	24194,0	28,0	28,0	166	>55
24028,0	24056,0	24194,0	24222,0	28,0	28,0	166	>55
24056,0	24084,0	24222,0	24250,0	28,0	28,0	166	>55
FH1	FH2	FL1	FL2				
24166,0	24194,0	24000,0	24028,0	28,0	28,0	166	>55
24194,0	24222,0	24028,0	24056,0	28,0	28,0	166	>55
24222,0	24250,0	24056,0	24084,0	28,0	28,0	166	>55

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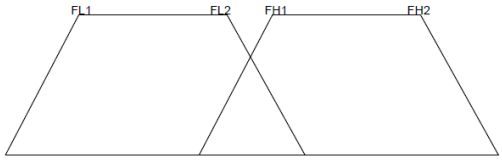

Fig.1 Frequency Diagram Attenuation

ISOLATION

Isolation in band (iso in) [Port 1 to the Port under test] > see Tab.1 in temperature
Isolation in band (iso in) [Port 1 to the Port under test] > see Tab.1 in temperature
Isolation out band (iso out) [Port 1 to the Port under test] > 40 dB

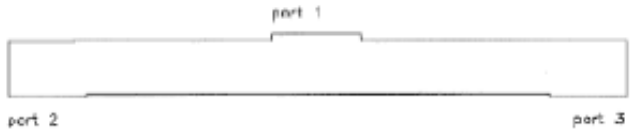

Fig.2 Port Description

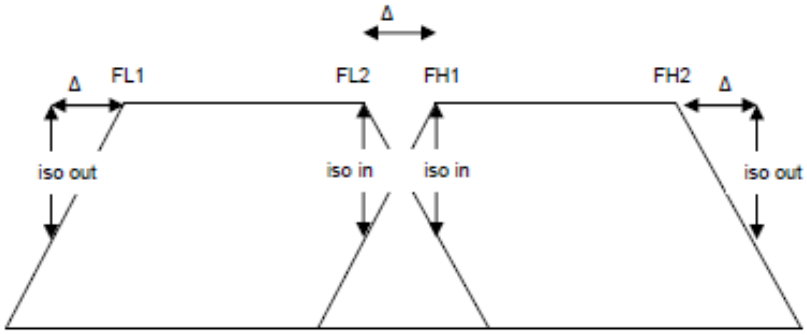

Fig.3 Frequency Diagram Isolation

Isolation port2 - port3

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

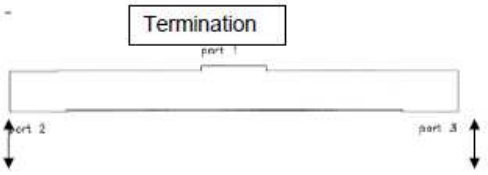

Fig.4 Isolation port 2 – port 3 setting

Isolation Port 2 – Port 3 > see Tab.1
See Fig. 5 for typical diagram of this measure

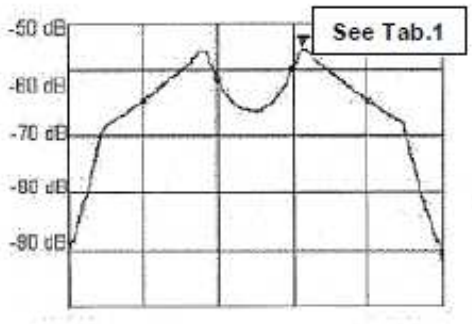

Fig.5 Isolation port 2 – port 3 diagram

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