

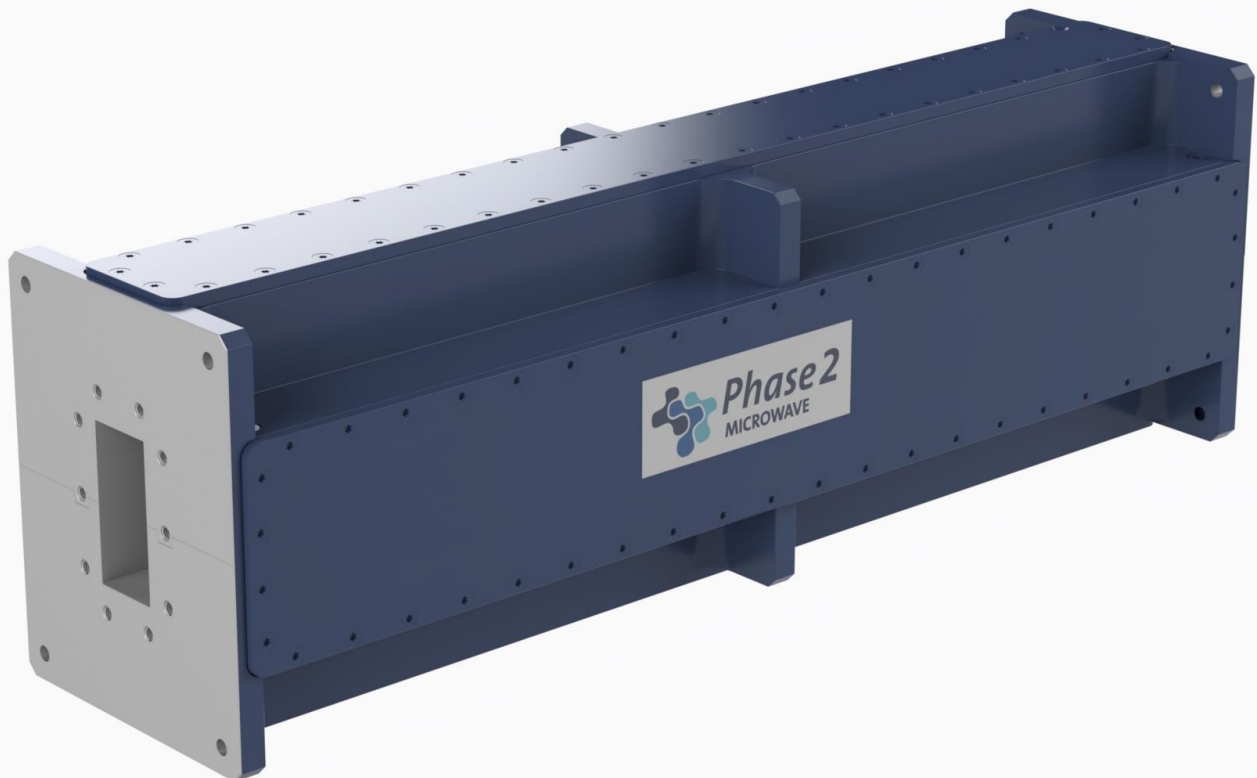


DATA SHEET
WR284 (WG10) Absorptive
Harmonic Filter
001294

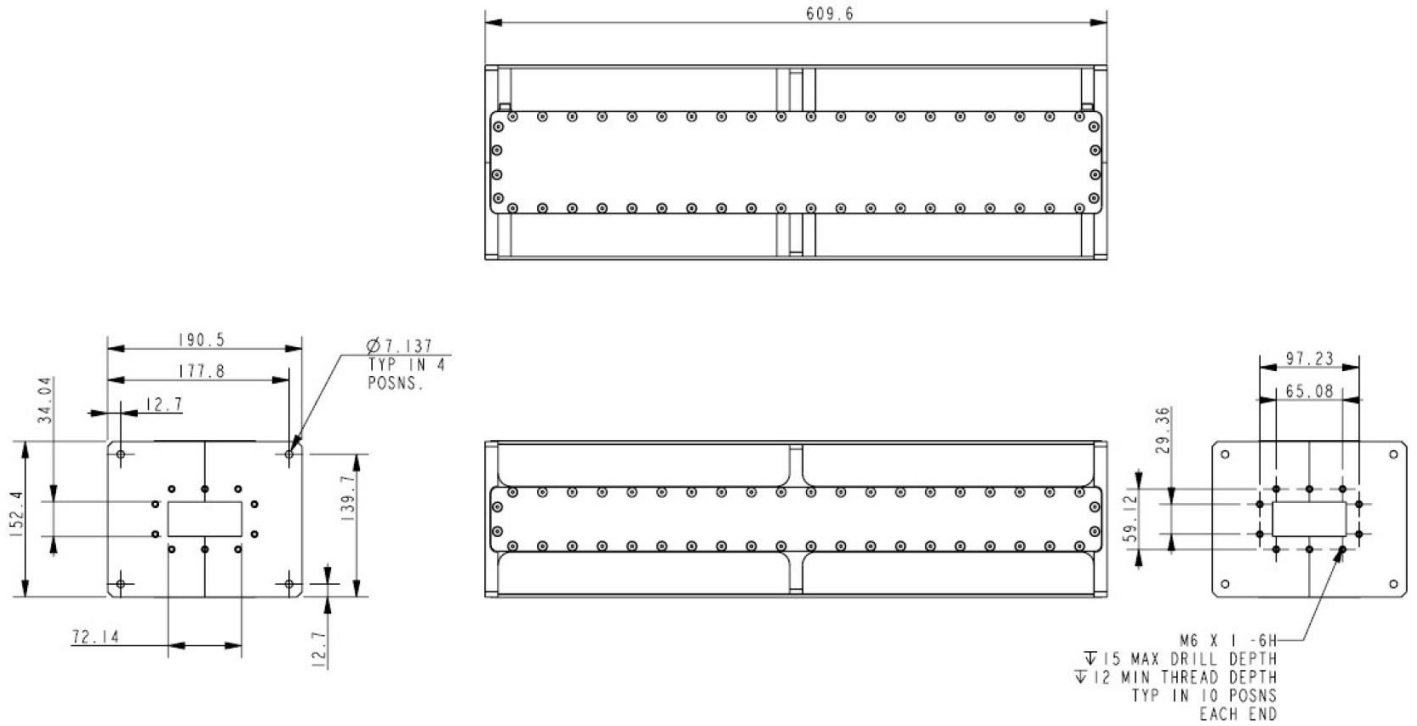
KEY FEATURES

- Low insertion loss
- Good return loss
- 1MW peak power rating
- High 2nd, 3rd and 4th Harmonic attenuation
- Convection cooled

This S band Harmonic absorptive waveguide filter is used in high power transmitter radar applications. The unit can be pressurised up to 30psi. Other power level variants are available upon request, and complimentary Lowpass and Bandpass filters can be supplied



Interface Control Drawing





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Specification

Model	001294
Passband	2.7 – 2.9 GHz
Insertion loss, 2.7 – 2.9GHz	≤ 0.15 dB (0.1 dB typical)
Return loss, 2.7 – 2.9GHz	> 26.4 dB (28 dB typical)
Return Loss Harmonic bands	
Second Harmonic, 5.4 - 5.8 GHz	> 14 dB (> 30 dB typical)
Second Harmonic, 8.1- 8.7 GHz	> 14 dB (> 24 dB typical)
Second Harmonic, 10.8 - 11.6 GHz	> 14 dB (> 18 dB typical)
Attenuation (TE10 and TE01)	> 40 dB (> 48 dB typical)
5.4 - 5.8 GHz (Second Harmonic)	
Attenuation (TE10 and TE01)	> 30 dB (> 32 dB typical)
8.1 - 8.7 GHz (Third Harmonic)	
Attenuation (TE10 and TE01)	> 10 dB (> 20 dB typical)
10.8 - 11.6 GHz (Fourth Harmonic)	
Peak power	1MW MAX
Average power (Harmonic Bands)	1kW @1% duty cycle

Environmental

Temperature Range	-10°C ~ +60°C
Operating Waveguide pressure	30 psi max, leakage rate 0.5ml/s

Mechanical

Connectors	WR284 each end
Size	001294-ICD-01 (ref drawing below)
Paint Finish	Epoxy Paint
RoHs	Compliant

Note: All information is correct at date of issue. Specifications are subject to change without notice
Issued: 05/10/21
Revision: 02



Measured Performance

