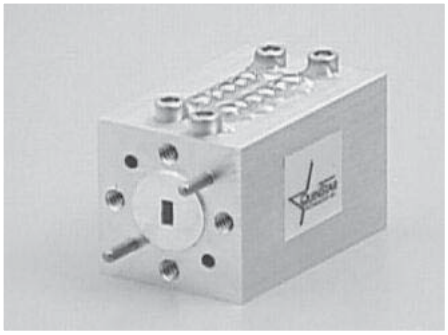
QUINSTAR TECHNOLOGY, INC.

Band Reject and Notch Filters

QNF

Characteristics

- Offered over 18-185 GHz
- High Rejection
- Low Insertion Loss over Pass Band
- Custom Designs Offered



Product Description

QuinStar Technology offers Series QNF band-reject and notch filters at any rejection frequency in the 18-185 GHz range. The performance of these filters is custom-tailored to suit the specific attenuation need of the application. The insertion loss depends on the separation between the rejection frequency and the pass band, and the amount of rejection required. Very large rejection (attenuation) can be achieved over a relatively narrow frequency range to allow a high power signal (or interference signals) to be virtually eliminated from the band. These filters are particularly well suited for eliminating harmonics and known interference frequencies from a system input or output in communication and plasma diagnostic receivers and radars.

The mechanical dimensions and performance characteristics are largely determined by the rejection requirements. QuinStar can also design and produce harmonic-reject filters for specific systems or equipment to meet compliance with regulations.

Specifications

Performance Parameter	Notch Filter	Band-Reject Filter
Frequency Range (Pass Band)	Up to Full Waveguide Band	
Rejection Frequency (center)	Anywhere From Waveguide Cutoff to 2.5 X Waveguide Cutoff Frequency	
Rejection Bandwidth (at 10 dB insertion loss points in rejection band	From 1% to 5% of Notch Center Frequency	
Insertion Loss	1-2.5 dB depending on required rejection characteristics	
Rejection Level (at center of rejection frequency band)	20 dB to 65 dB	

Ordering Information

Model Number **QNF -** **ABC DE F GH**

- **ABC** — rejection band center frequency (or notch frequency), in GHz
- **DE** — rejection bandwidth (full width at 10 dB rejection points)
- **F** — waveguide band
  - K = K-band
  - A = Ka-band
  - Q = Q-band
  - U = U-band
  - V = V-band
  - E = E-band
  - W = W-band
  - F = F-band
  - D = D-band
- **GH** — rejection (min.) at rejection band center (notch frequency)

Made in USA

24085 Garnier Street, Torrance, CA 90505 ❖ (310) 320-1111 Fax: (310) 320-9968 ❖ sales@quinstar.com ❖ www.quinstar.com