



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)	From Waveguide Cutoff to 2.5 Waveguide Cutoff	
Rejection Bandwidth (at 10 dB insertion loss points in rejection band)	From 1% to 5% of Notch Center Frequency	4% to 10% of Rejection Center Frequency
Insertion Loss	1-2.5 dB depending on required rejection characteristics	2-2.5 dB depending on bandwidth and desired rejection level
Rejection Level	20 dB to 65 dB	From 15 to 40 dB over the rejection band

Ordering Information

Model Number **QNF -**

ABC DE F GH

rejection band center frequency (or notch frequency), in GHz

rejection bandwidth (full width at 10 dB rejection points)

rejection (min.) at rejection band center (notch frequency)

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