



Single and Triple Hybrid Ring Power Dividers

QHR

Characteristics

- ◆ High Isolation
- ◆ Low Insertion Loss

Product Description

QuinStar Technology's QHR series of hybrid rings are four-port, inherently-matched 3 dB power splitting devices. Available in standard waveguide size from 18 to 220 GHz, these units are capable of both in-phase and out-of-phase splitting.

QuinStar Technology's QHR series triple hybrid rings consist of three single hybrid rings integrated into one compact component. This device provides four output



ports (each with power that is nominally 6 dB below input power level) for use in dual balanced mixers and power divider/combiner circuits.

The QHR series hybrid rings are used in balanced mixers and power divider/combiner circuits where precise power splitting, high isolation, and accurate phase inversion are necessary

Specifications

FREQUENCY BAND	K	Ka	Q	U	V	E	W	F	D	G
Isolation (dB) Max.	20	20	20	20	20	20	20	20	20	20
Insertion Loss (dB) Max.	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.8	0.8
Power Imbalance Max (dB)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
VSWR Max.	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.30
Bandwidth (GHz)	2	3	3	4	4	4	4	4	4	4

Ordering Information

