QHF-23A SERIES – 90° POWER DIVIDERS/COMBINERS

TECHNICAL FEATURE

FEATURES

- 1 to 1250 MHz
- Low Insertion Loss
- Lumped Element Circuits
- Low Profile Hermetic Package

Phasing Diagram - A				
	1	2	3	4
1		0°	– 90°	Isol.
2	0°		Isol.	– 90°
3	– 90°	Isol.		0°
4	Isol.	– 90°	0°	

PRINCIPAL SPECIFICATIONS

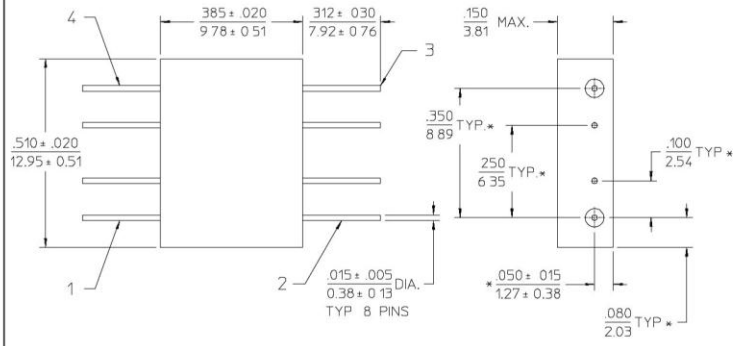
Model Number	Center Frequency	Frequency Performance
QHF-23A-160	160 MHz	107 - 214 MHz
QHF-23A-1000	1000 MHz	750 - 1250 MHz
QHF-23A-***B	1 to 300 MHz	Octave

For complete Model Number replace *** with desired Center Frequency in MHz.

GENERAL SPECIFICATIONS

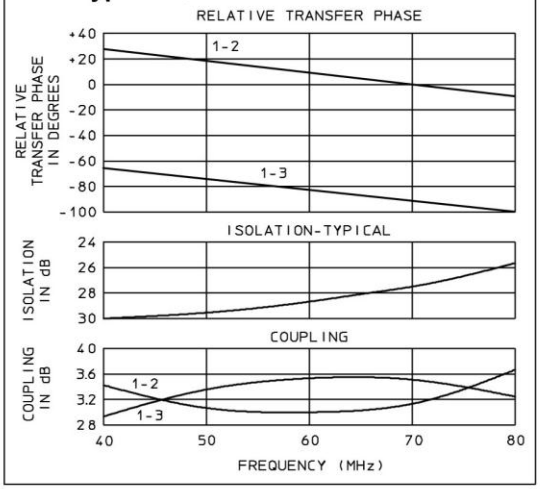
Coupling:	– 3 dB nom.
Impedance:	50 Ω nom.
Isolation:	
< 300 MHz:	20 dB min., 25 dB typ.
> 300 MHz:	18 dB min., 22 dB typ.
Insertion Loss:	
< 75 MHz:	0.5 dB max., 0.3 dB typ.
> 75 MHz:	0.75 dB max., 0.5 dB typ.
Phase Tolerance:	90° ± 3° max.
Amplitude Balance:	1 dB max.
VSWR (In/Out):	
< 300 MHz:	1.3:1 max.
> 300 MHz:	1.5:1 max.
CW Input:	1 W max.
Weight, nominal:	0.1 oz (2.8 g)

A-Package Outline



NOTES:
1. Tolerance on 3 place decimals ±.010(.25) except as noted.
2. Dimensions in inches over millimeters.
3. Lead dimensions apply only at body.
4. All unmarked pins are case ground.

Typical QHF-23A-60 Performance



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General Notes:

1. The QHF-23A series of 3 dB Quadrature Hybrids covers 1 to 1250 MHz using special lumped element designs to minimize size for high performance in applications requiring small size. The 0.385" by 0.5" flatpack which houses these 3 dB Quadrature Hybrids is ideally suited to aerospace applications where inherent package reliability and hermeticity are essential.

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