

# QHF-2G SERIES – 90° POWER DIVIDERS/COMBINERS

## TECHNICAL FEATURE

### FEATURES

- 54 MHz to 2.0 GHz
- 1 kW Peak
- Moisture Sealed
- Reliable Stripline “Sandwich” Package
- Filmbrid

### PRINCIPAL SPECIFICATIONS

Model Number	Frequency Range, GHz	Isolation, dB,		Insertion Loss, dB, Max.	Amplitude Bal., dB, Max.	Phase Tolerance	CW Input*, W	Weight oz.(g) Nom.	Case Style
		Min.	Typ.						
QHF-2-.312GG	.225 - .400	23	30	0.30	0.9	90° ± 3°	100	.4 (11)	G
QHF-2-.312GN	.225 - .400	20	25	0.25	1.0	90° ± 2°	200	.3 (8)	N
QHF-2-.312GP	.225 - .400	20	25	0.25	1.0	90° ± 2°	200	.5 (14)	P
QHF-2-.375GF	.250 - .500	25	30	0.25	1.0	90° ± 2°	200	.5 (14)	F
QHF-2-1.50GK	1.00 - 2.00	20	25	0.25	1.0	90° ± 2°	200	.4 (11)	K

\*CW input power with 1.2:1 VSWR<sub>out</sub>

### ENVIRONMENTAL QUALIFICATIONS

Exposure	Method	Test Condition
Altitude*	105C	B
Humidity	106D	—
Thermal Shock	107D	A
Life Test	108	D
Vibration	201A	—
Mechanical Shock	213B	A
Random Vibration (15 minutes per axis)	214	11C

\* Tab interfaces must be sealed by customer if device is to be used at rated peak power.

### GENERAL SPECIFICATIONS

Coupling:	– 3 dB nom.
Impedance:	50 Ω nom.
VSWR:	1.1 typ., 1.2 max.
Peak Power:	1 kW max.
Terminals:	4 Solder Tabs
Operating Temperature:	– 55° to +85°C
Alternate Outlines:	Optional

### General Notes:

1. The QHF-2-G series consists of quadrature backward-wave hybrid couplers which use shielded stripline design techniques to cover octave bands in the frequency range 225 MHz to 2 GHz.
2. The Filmbrid™ Sandwich Package is sealed under heat and pressure insuring the printed substrates and low-loss dielectric laminates are permanently bonded to minimize the effects of dirt and moisture and prevent separation when subjected to shock and vibration.
3. The QHF-2-G series is ideally suited for applications requiring high performance, inherent reliability and low cost. Special customized units are available for special bandwidth and frequency applications.

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QHF2G.doc. This revision supersedes all previous releases. All technical information is believed to be accurate, but no responsibility is assumed for errors.

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