

QHM-4R-G SERIES – 90° POWER DIVIDERS/COMBINERS

TECHNICAL FEATURE

FEATURES

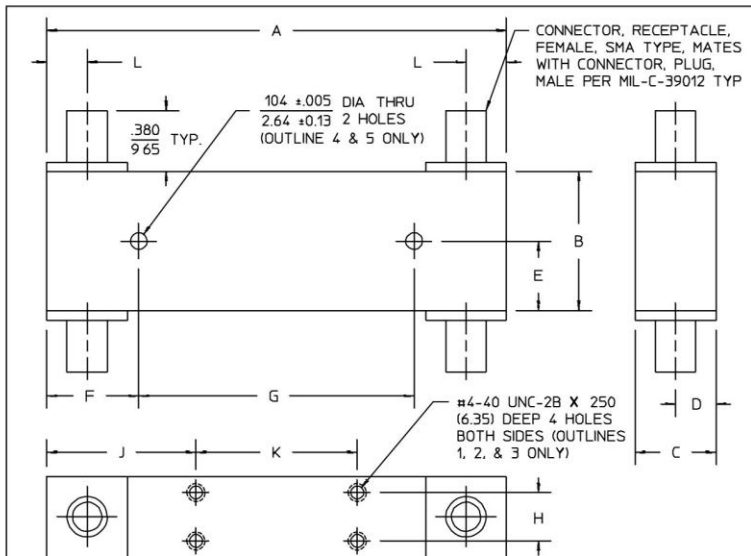
- 500 MHz to 26.5 GHz
- Multi-Octave Bandwidth
- High Isolation
- Low Insertion Loss
- SMA

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	Frequency Range, GHz	Isolation, dB, Min.	Amplitude Balance, dB, Max.	Phase Tolerance, Max.	Insertion Loss, dB, Max.	VSWR, All Ports, Max.	Weight, oz.(g) Nom.	Outline Dwg #
QHM-4R-4.7G	0.5 - 9.0	18	1.0	90° ± 5°	1.3	1.40:1	10.0 (283)	1
QHM-4R-9.5G	1.0 - 18.0	17	1.0	90° ± 10°	1.8	1.35:1	5.0 (142)	2
QHM-4R-10G	2.0 - 18.0	17	1.2	90° ± 7°	1.2	1.40:1	3.5 (99)	3
QHM-4R-16G	6.0 - 26.5	14	1.3	90° ± 8°	1.2	1.60:1	1.7 (48)	4*

*Special order.



OUTLINE	A	B	C	D	E	F	G	H	J	K	L
1	8.150 ±.030 207.01 ±0.76	1250 31.75	.500 12.70	.250 6.35	—	—	.300 7.62	2.075 ±.030 52.71 ±0.76	4.000 ±.030 101.60 ±0.76	.250 6.35	
2	4.650 118.11	1250 31.75	.500 12.70	.250 6.35	—	—	.300 7.62	1.325 33.66	2.000 50.80	.250 6.35	
3	2.850 72.39	1.100 27.94	.500 12.70	.250 6.35	—	—	.300 7.62	.925 23.50	1.000 25.40	.250 6.35	
4	1.720 43.69	.862 21.89	.400 10.16	.200 5.08	.431 10.95	.570 14.48	.578 14.68	—	—	.250 6.35	
5	1.350 34.29	.862 21.89	.390 9.91	.190 4.83	.431 10.95	.490 12.45	.375 9.53	—	—	.275 6.99	

NOTES: 1. Tolerance on 3 place decimals ±.020(.51) except as noted.
2. Dimensions in inches over millimeters.

GENERAL SPECIFICATIONS

Coupling: — 3 dB nom.
 Impedance: 50 Ω nom.
 CW Input: 1 Watt max.
 Operating Temperature: -55° to +85°C

General Notes:

1. The QHM-4R-G series covers 500 MHz to 26.5 GHz using an advanced stripline design for high isolation and low loss.
2. Signals applied to any port will split equally between the opposite pair with the adjacent port remaining isolated. The phase relationship is 0° to the port directly opposite and -90° to the port on the diagonal.
3. These units comply with MIL-P-23971 and can be supplied screened for compliance with additional specifications for military and space applications requiring the highest reliability.

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