500 MHz to 16 GHz / Octave and Multi-Octave Models / Low Loss and VSWR / Low Cost / SMA



PRINCIPAL SPECIFICATIONS													
Model Number	Frequency Range, GHz	*Coupling Loss, dB, Max.	Frequency Sensitivity dB, Max.	Isolation, dB, Min.	Input CW, W	Power, Peak, kW	VSWR, Max.	Outline Drawing Ref #					
QHM-2M75G	0.5 - 1.0	$3.1 \pm 0.6$	± 0.5	28	50	3	1.10:1	4					
QHM-2M-1.5G	1.0 - 2.0	$3.1 \pm 0.6$	$\pm 0.5$	28	50	3	1.10:1	5					
QHM-2M-3G	2.0 - 4.0	$3.1 \pm 0.6$	$\pm 0.5$	22	50	3	1.20:1	1					
QHM-2M-4G	2.6 - 5.2	$3.1 \pm 0.6$	$\pm 0.5$	20	50	3	1.25:1	2					
QHM-2M-6G	4.0 - 8.0	$3.2 \pm 0.7$	$\pm 0.5$	18	50	3	1.25:1	2					
QHM-2M-9G	6.0 - 12.4	$3.2 \pm 0.7$	$\pm 0.5$	18	50	3	1.30:1	2					
QHM-2M-12G	7.5 - 16.0	$3.4 \pm 0.9$	$\pm 0.6$	15	50	2	1.40:1	3					
QHM-3M-5G	2.0 - 8.0	$3.3 \pm 0.8$	$\pm 0.4$	17	30	3	1.30:1	6					
QHM-3M-8G	4.0 - 12.4	$3.3 \pm 0.8$	± 0.4	15	20	2	1.40:1	7					
*Coupling Loss includes insertion loss and frequency sensitivity													

	OUTLINE	Α	В	C	D	Ε	WT	OZ (G)			
	1	1.150 29 21	500 12 70	314 7 98	580 14 73	660 16 76	.63	(18)			
	2	1.000 25 40	500 12 70	314 7 98	500 12 70	500 12 70	.60	(17)			
	3	1.000 25.40	.580 14.73	392 9.96	500 12.70	500 12.70	.63	(18)			
CONNECTOR, RECEPTACLE, FEMALE, SMA TYPE, MATES WITH CONNECTOR, PLUG, MALE PER MIL-C-39012 TYP.  A  F/2  D  A  B  C											
OUTLINE A	B C .500 840	1370	2.560	F 380	WT.		<u>3)</u>				
4 77.72	12.70 2134	34.80	65.02	9 65	1.20						
5 1.780 45 21	<u>.500</u> <u>.640</u> 12.70 16 26	<u>.500</u> 12 70	1.280 32.51	<u>.380</u> 9 65	85	(24)					
6 2.600 66.04	<u>.750</u> <u>.670</u> 19 05 <u>17 02</u>	1.260 32.00	2.030 5156	.440 11.18	1.62	(46	)				
$7 \frac{1.720}{43.69}$	<u>.600</u> <u>.610</u> 15.24 15.49	.500 12 70	1.220 30 99	.500 12 70	1.06	(30	)				

## **GENERAL SPECIFICATIONS**

Impedance: 50  $\Omega$  nom.

Operating Temperature: - 55° to +85°C

Other frequency bands: Available options

## **General Notes:**

- 1. The QHM-2M and QHM-3M series of quadrature hybrid couplers covers 500 MHz to 12.4 GHz in octave and multi-octave bands, respectively.
- 2. These units have been designed using miniature stripline construction to achieve high isolation and low VSWR. They may be used in a wide variety of applications requiring -3 dB power division either in-phase or in phase quadrature (or both). Such signals are often required in mixers, modulators and phase shifters among others.

16Apr96