

**PRINCIPAL SPECIFICATIONS**

Model Number, BNC	Model Number, SMA	Freq. Range, MHz	Amplitude Balance, dB, Max.	Bandwidth Ratio	Insertion Loss, dB, Max.	Phase Tolerance	VSWR, Max.	Isolation, dB, Min.	Weight, oz.(g) Nom.
QH-7-4.9	QHM-7-4.9	0.1 - 10	1.0	100 : 1	1.5	90° ± 5°	1.3:1	20	16(448)
QH-7-15	QHM-7-15	0.5 - 30	1.0	60 : 1	1.5	90° ± 3°	1.3:1	20	7(196)
QH-7-17	QHM-7-17	2 - 32	1.0	16 : 1	1.0	90° ± 3°	1.3:1	20	7(196)
QH-7-41	QHM-7-41	2 - 80	1.0	40 : 1	1.5	90° ± 3°	1.3:1	20	7(196)
QH-7-126	QHM-7-126	2 - 250	1.3	125 : 1	2.0	90° ± 6°	1.4:1	18	7(196)

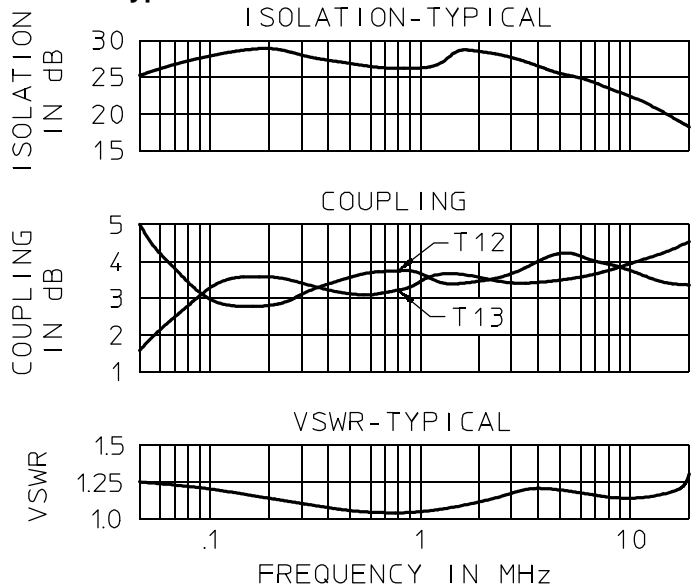
**General Notes:**

1. The QH-7 Series consists of multi-octave models with bandwidth ratios ranging from 16:1 to 125:1. Their function is to split an input signal into two equal amplitude, isolated outputs having a quadrature phase relationship. Conversely, these units may be used to combine two quadrature phased, equal amplitude signals into a single output.

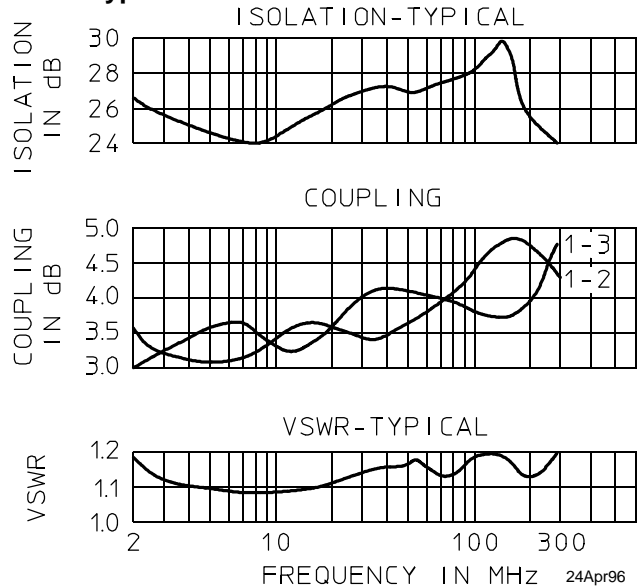
**GENERAL SPECIFICATIONS**

Nominal Coupling: - 3 dB nom.  
 CW Input: 1 W max. (1.2:1 VSWR<sub>out</sub>)  
 (0.1 W for QH-7-4.9)  
 Impedance: 50 Ω nom.  
 Operating Temp: - 55° to +85°C

**Typical Performance - QH-7-4.9 Model**



**Typical Performance - QH-7-126 Model**

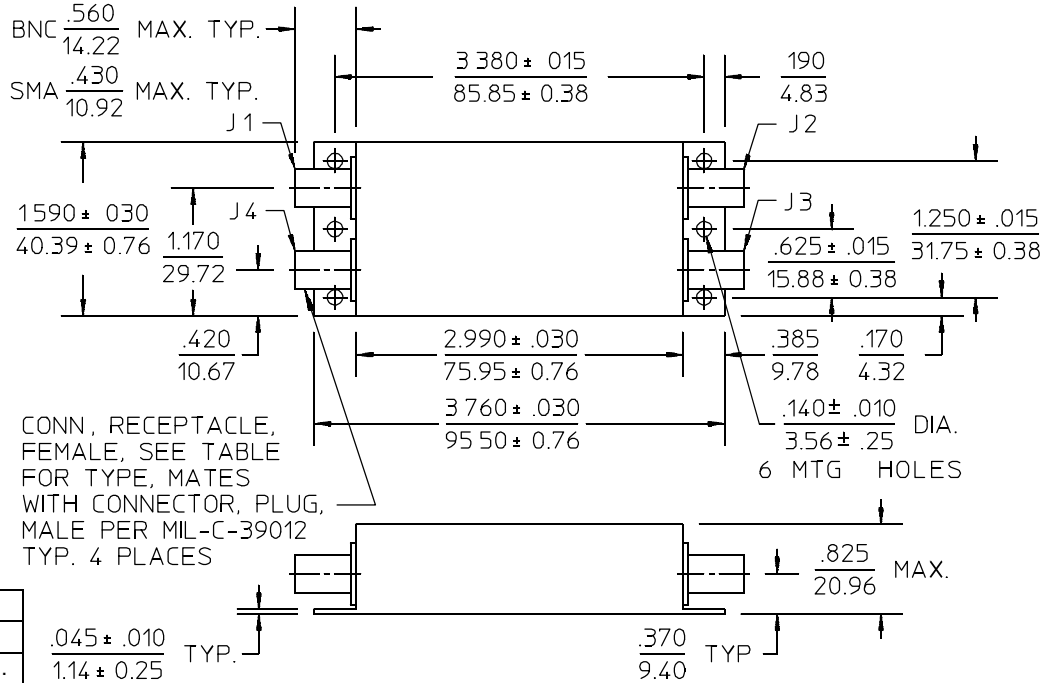


# QH & QHM-7 Series 90° POWER DIVIDERS/COMBINERS

100 kHz to 250 MHz / Multi-Section Lumped Element Designs / BNC & SMA Versions



## QH/QHM-7 Outlines (except QH/QHM-7-4.9)

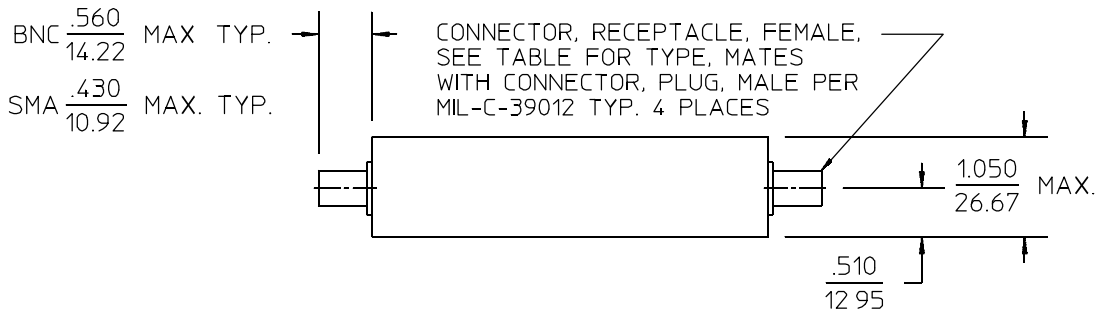


**Phasing Diagram - C**

	1	2	3	4
1		ref.	+90°	Isol.
2	ref.		Isol.	-90°
3	-90°	Isol.		ref.
4	Isol.	+90°	ref.	

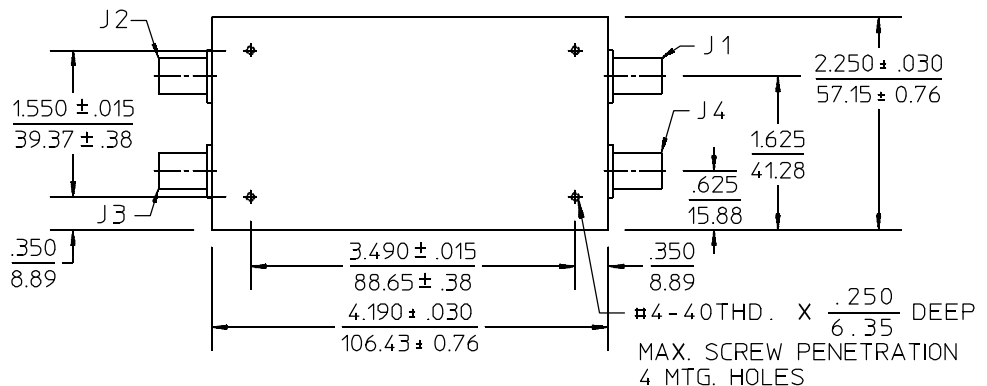
NOTES: 1. Tolerance on 3 place decimals  $\pm .020(.51)$  except as noted.  
2. Dimensions in inches over millimeters.

## QH/QHM-7-4.9 Outline



**Phasing Diagram - C**

	1	2	3	4
1		ref.	+90°	Isol.
2	ref.		Isol.	-90°
3	-90°	Isol.		ref.
4	Isol.	+90°	ref.	



NOTES: 1. Tolerances on 3 place decimals  $\pm .020(.51)$  except as noted.  
2. Dimensions are in inches over millimeters.

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