

3 DB 90°

# COUPLERS, HYBRID

WITH SMA OR N CONNECTORS 25 MHz TO 18 GHz

# SERIES QH

## GENERAL SPECIFICATIONS

Frequency Range:	25.0 MHz to 18.0 GHz
RF Impedance	50 OHMS
Temperature Information:	Operating temperature from -55° to +85°C.
Connectors:	SMA or Type N Female

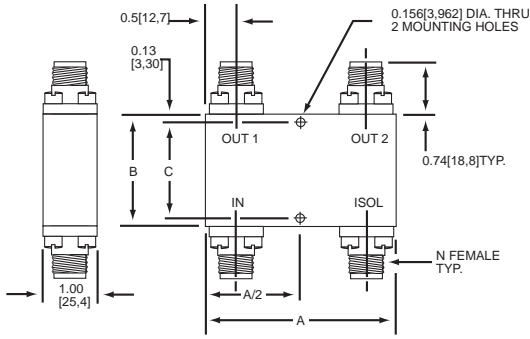


FIG.1 SERIES QH-N

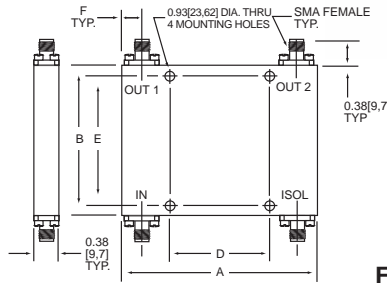
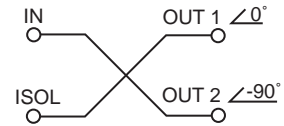


FIG.2 SERIES QH



Type SMA Model No.	Type* N Model No.	Freq. Range GHz	Nominal Coupling dB	Max. Dev From Nominal Coupling dB	Max. Ins. Loss dB	Min.* Isol. dB	Max.* VSWR	Min. Power** Capability		Phase Bal. Deg.	Mechanical Outlines—									
								Peak kW	Avg. Watts		Fig. 2 Series QH						Fig. 1 Series QH-N			
											A	B	C	D	E	F	A	B	C	
											in	in	in	in	in	in	in	in	in	
											[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	
QH-17	QH-17N	0.025-0.05	3.0+0.15/-0	±0.40	0.15	22	1.15	10	75	±1.0	3.00	2.00	0.55	1.900	1.800	0.25	3.50	2.00	1.750	
											[76.2]	[50.8]	[13.97]	[48.26]	[45.7]	[6.5]	[88.9]	[50.8]	[44.45]	
QH-20	QH-20N	0.05-0.10	3.0+0.15/-0	±0.40	0.15	22	1.15	10	75	±1.0	2.90	1.90	0.55	1.800	1.700	0.25	3.40	1.90	1.650	
											[73.7]	[48.26]	[13.97]	[45.7]	[43.18]	[6.4]	[86.36]	[48.26]	[41.91]	
QH-21	QH-21N	0.1-0.2	3.0+0.15/-0	±0.40	0.15	22	1.15	10	75	±1.0	2.15	1.60	1.08	1.400	1.400	0.25	2.65	1.60	1.350	
											[54.61]	[40.64]	[27.43]	—	[35.56]	[6.4]	[67.31]	[40.64]	[34.29]	
QH-23	QH-23N	0.2-0.4	3.0+0.15/-0	±0.40	0.15	22	1.15	10	75	±1.0	1.90	1.25	0.95	1.050	1.050	0.25	2.40	1.25	1.000	
											[48.26]	[31.75]	[24.13]	—	[26.67]	[6.4]	[61.0]	[31.75]	[25.4]	
QH-26	QH-26N	0.25-0.5	3.0+0.15/-0	±0.40	0.15	22	1.15	10	75	±1.0	1.65	1.15	0.82	0.950	0.950	0.25	2.15	1.15	0.900	
											[41.91]	[29.21]	[30.83]	—	[24.13]	[6.4]	[54.61]	[29.21]	[22.86]	
QH-28	QH-28N	0.5-1.0	3.0+0.15/-0	±0.40	0.15	22	1.15	10	75	±1.0	2.80	0.50	0.55	1.700	0.300	0.20	3.40	1.00	0.750	
											[71.12]	[12.7]	[13.97]	[48.13]	[7.6]	[5.1]	[61.0]	[25.4]	[19.1]	
QH-31	QH-31N	1.0-2.0	3.0+0.15/-0	±0.40	0.15	22	1.20	10	75	±2.0	1.65	0.50	0.82	0.300	0.20		2.25	0.75	0.500	
											[41.91]	[12.7]	[20.83]	—	[7.6]	[5.1]	[57.15]	[19.1]	[12.7]	
QH-33	QH-33N	1.5-3.0	3.0+0.20/-0	±0.40	0.20	22	1.20	10	75	±2.5	1.25	0.50	0.63	0.300	0.20		2.25	0.75	0.500	
											[31.75]	[12.7]	[16.0]	—	[7.6]	[5.1]	[57.15]	[19.1]	[12.7]	
QH-36	QH-36N	2.0-4.0	3.0+0.20/-0	±0.45	0.20	22	1.20	7	60	±2.5	1.00	0.50	0.50	0.300	0.20		2.25	0.75	0.500	
											[15.4]	[12.7]	[12.7]	—	[7.6]	[5.1]	[57.15]	[19.1]	[12.7]	
QH-43	QH-43N	2.6-5.2	3.0+0.20/-0	±0.45	0.20	20	1.25	7	60	±3.0	1.00	0.50	0.50	0.300	0.20		2.25	0.75	0.500	
											[15.4]	[12.7]	[12.7]	—	[7.6]	[5.1]	[57.15]	[19.1]	[12.7]	
QH-45	QH-45N	4.0-8.0	3.0+0.25/-0	±0.50	0.25	20	1.30	7	50	±3.0	0.90	0.50	0.45	0.300	0.20		2.25	0.75	0.500	
											[22.86]	[12.7]	1.14	—	[7.6]	[5.1]	[57.15]	[19.1]	[12.7]	
QH-51	—	7.0-12.4	3.0+0.35/-0	±0.50	0.35	17	1.35	6	50	±4.0	0.95	0.50	0.48	0.300	0.20		—	—	—	
											[24.13]	[12.7]	[12.2]	—	[7.6]	[5.1]				
QH-57	—	8.0-16.0	3.0+0.50/-0	±0.60	0.50	16	1.45	5	50	±5.0	0.95	0.50	0.48	0.300	0.20		—	—	—	
											[24.13]	[12.7]	[12.2]	—	[7.6]	[5.1]				
QH-58	—	12.0-18.0	3.0+0.50/-0	±0.60	0.50	16	1.50	5	50	±5.0	0.95	0.50	0.48	0.300	0.20		—	—	—	
											[24.13]	[12.7]	[12.2]	—	[7.6]	[5.1]				
MULTI-OCTAVE BANDS																				
QH-55	QH-55N	0.5-2.0	3.0±0.6/-0	±0.60	0.60	18	1.40	5	50	±5.0	3.50	0.50	1.75	0.300	0.25		4.00	0.75	0.500	
											[88.9]	[12.7]	[44.45]	—	[7.6]	[6.4]	[101.6]	[19.1]	[12.7]	
QH-19	—	2.0-8.2	3.0±0.7/-0	±0.70	0.70	16	1.50	5	50	±6.0	1.70	0.50	0.85	0.300	0.20		—	—	—	
											[43.18]	[12.7]	[21.6]	—	[7.6]	[5.1]				
QH-88	—	8.0-18.0	3.0±0.7/-0	±0.70	0.70	16	1.50	5	30	±7.0	0.95	0.50	0.48	0.300	0.20		—	—	—	
											[24.13]	[12.7]	[12.2]	—	[7.6]	[5.1]				

\* Units with Type N connectors: up to 4GHz multiply VSWR's by 1.05 and subtract 2 dB from isolation. Above 4GHz multiply VSWR's by 1.10 and subtract 3dB from isolation.

\*\* SMA= 3 KW peak maximum

KEY: Inches[Millimeters] .XX ±.03 .XXX ±.010 [.X ±0.8 .XX ±0.25]