

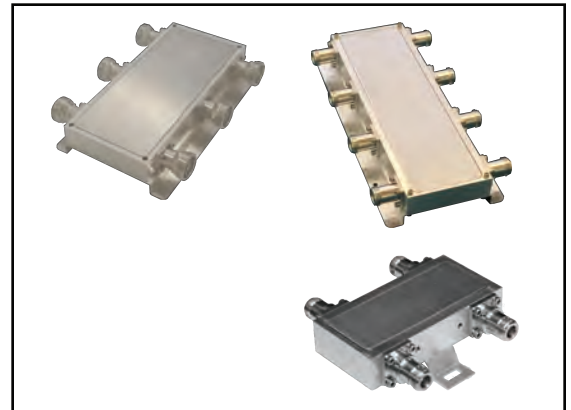


-DAS- Hybrids and Hybrid Combiners

Made in USA.

Type N, 7-16 DIN, 4.1-9.5 & 4.3-10.0 MINIDIN 2x2, 3x3, & 4x4

Hybrids and Hybrid Combiners	
Frequency:	698-2700 MHz
Passive Intermodulation(PIM):	160 dBc typical, see chart below
Power:	Varies by Model, see chart below
Terminations:	All ports must be terminated with 50 Ohm Loads for proper operation, See Chart below
Temperature:	-35 to 65 °C
Material:	Triplate, Clear Iridite
Environment:	IP67 RoHS Compliant

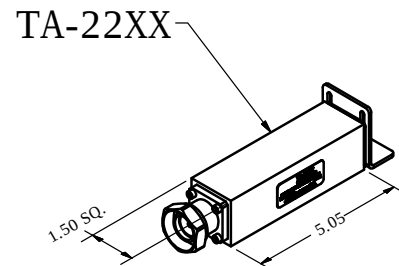
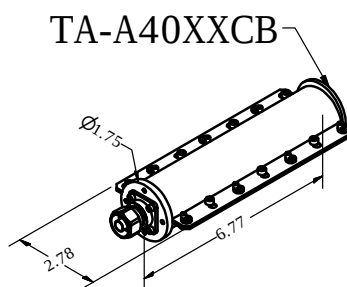
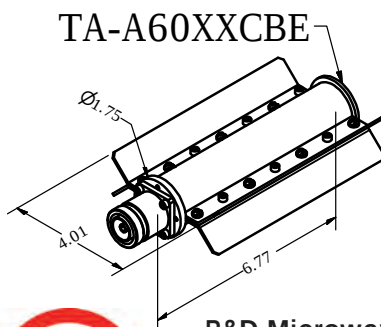
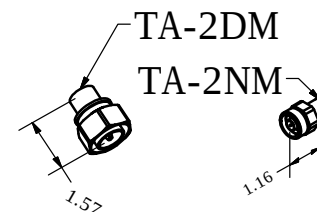


R&D Microwaves Hybrids and Hybrid combiners come in 2x2, 3x3, and 4x4 configurations with either 7-16 DIN, Type N, 4.1-9.5 or 4.3-10.0 MINIDIN female connectors. Any unused ports must be terminated(see table). The Hybrids provide "lossless" combining with low insertion loss.

		C1-C50-03	HD-A89	HM-A38	HM-A32
Frequency (MHz)		350-2700	698-2700	698-2700	698-2700
Config In x Out		2x2	2x2	3x3	4x4
Model	Type N	C1-C50-03N	HD-A89N	HM-A38N	HM-A32N
	7-16 DIN	C1-C50-03D	HD-A89D	HM-A38D	HM-A32D
	4.3-10.0	C1-C50-03D43	HD-A89D43	HM-A38D43	HM-A32D43
	4.1-9.5	C1-C50-03D41	HD-A89D41	HM-A38D41	HM-A32D41
Isolation (dB)	Type N				25
	7-16 DIN			>2.2 = 23 dB	25
	4.3-10.0	30	30		23
	4.1-9.5			<2.2 = 25 dB	23
Nom. Path Loss (dB)	Type N				
	7-16 DIN	3.0	3.0	4.8	6.0
	4.3-10.0				
	4.1-9.5				
Disipative Loss (dB)	Type N				
	7-16 DIN	0.2	0.2	0.5	0.7
	4.3-10.0				
	4.1-9.6				
Amplitude Balance(dB)	Type N			<2.2 = 5.2±1.0	<2.4=6.2±1.1
	7-16 DIN	±0.75	±0.6		
	4.3-10.0			>2.2=5.3±1.3	>2.4=6.2±1.3
	4.1-9.6				
Return Loss (dB)	Type N				23
	7-16 DIN				21
	4.3-10.0	23	25	20.8	20
	4.1-9.6				21
Power Each Port		400	200	150	100
PIM		165	160	155	155
Freq. Sens. ± dB (MHz)		0.75	0.6	0.8	1.1 (698-2400)
					1.3 (2400-2700)

OPTIONAL LOADS:
see Low PIM Cable Termination Data Sheet for specs and more options

Optional Loads To Be Used For unterminated Ports		
Model	Power	Connector
TA-2XX	2 Watts	7-16 Din, N
TA-22XX	20 Watts	7-16, 4.3-10, 4.1-9.5, N
TA-A40XXCB	40 Watts	7-16, 4.3-10, 4.1-9.5, N
TA-A60XXCBE	60 Watts	7-16, 4.3-10, 4.1-9.5, N



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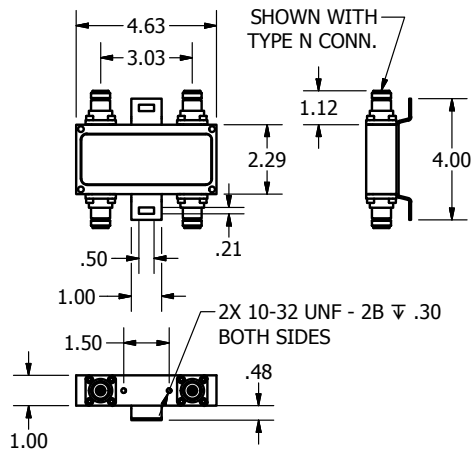




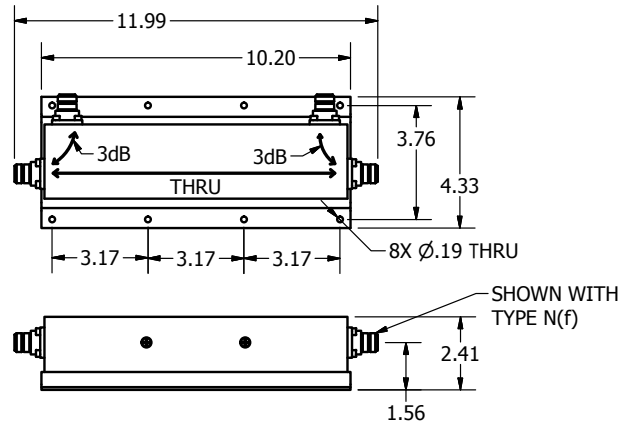
Hybrids and Hybrid Combiners

Type N, 7-16 DIN, & 4.1-9.5 MiniDIN 2x2, 3x3, & 4x4

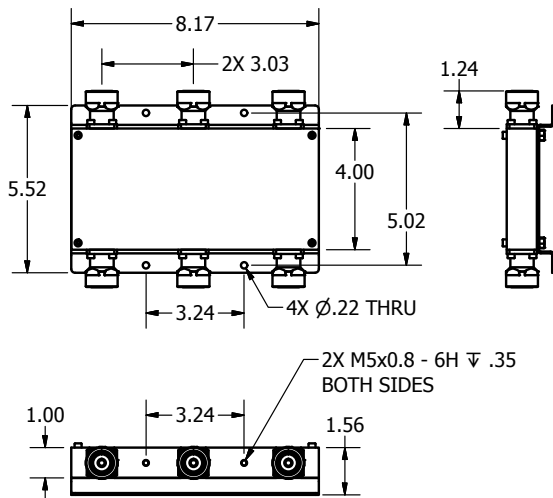
HD-A89 OUTLINE DRAWING



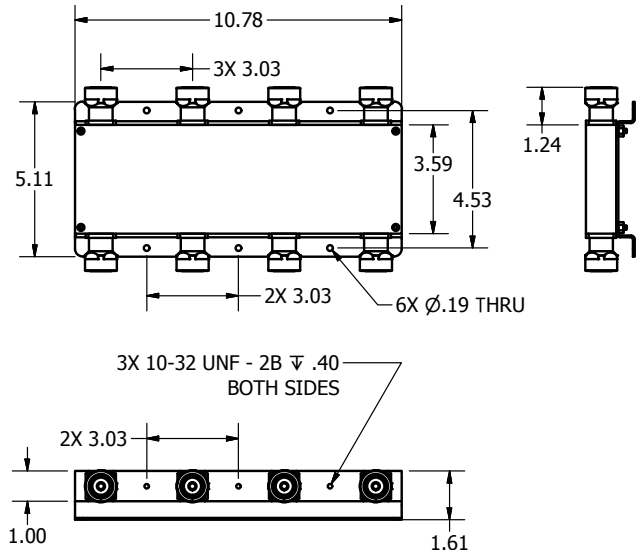
HD-A01 OUTLINE DRAWING



HM-A38 OUTLINE DRAWING



HM-A32 OUTLINE DRAWING



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