

3dB TEMLINE™ Hybrid Couplers Series

High Power, Octave Band, Quadrature Designs



Features

- Average Power Rating 1,000 Watts, Normalized at 1 GHz
- 1 dB Maximum Unbalance²
- Meet MIL-E-5400 Class 3 or Equivalent
- Screenable to MIL-P-23971 or Equivalent
- TYPE “N” Connectors

The 3dB TEMLINE Hybrid Couplers have proven performance with over five decades of quality and reliability under Sage Laboratories, now a legacy product supported by API Technologies. These couplers are available as standard parts or can be customized with a variety of options including customized frequency bands & optimization, mounting schemes, screening and testing upgrades.

Technical Specifications

Model Number	Frequency Range (MHz)	Isolation Min (dB)	VSWR Max	Insertion Loss, Max ¹ (dB)
749	125 – 250	23	1.20	0.1
750	250 – 500	20	1.20	0.1
751	500 – 1000	20	1.25	0.1
752	1000 – 2000	20	1.25	0.1
753	2000 – 4000	20	1.25	0.1

NOTES:

1. Maximum loss is the actual dissipative loss and reflective loss due to VSWR. It does not include coupling loss.
2. Unbalance is measured as the difference between the coupled and mainline output ports from the mean coupling at each frequency.



Model # 751



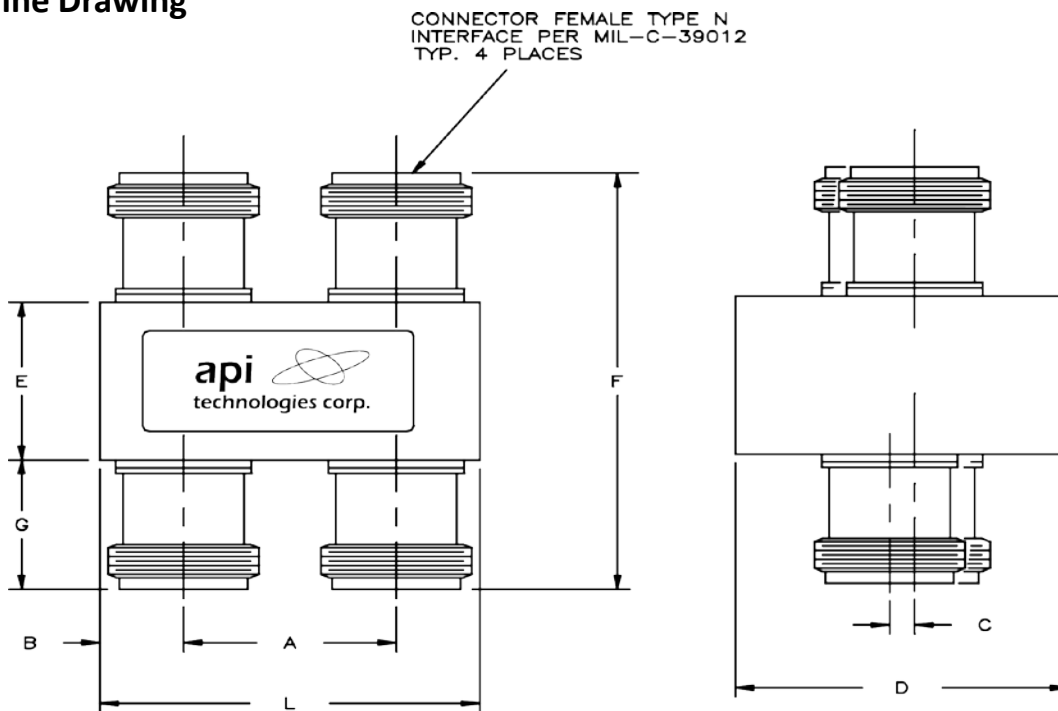
Model # 752

3dB TEMLINE Hybrid Couplers

Mechanical Specifications

Model Number	Dimensions (See Drawing on Page 2)				Weights	
	A"	A (cm)	L"	L (cm)	Ounces	Grams
749	11.00	(27.94)	11.68	(29.67)	19	538
750	5.63	(14.30)	6.31	(16.03)	13	368
751	2.78	(7.06)	3.47	(8.81)	7	198
752	1.40	(3.56)	2.09	(5.31)	5	142
753	.82	(2.08)	1.50	(3.58)	4	113

Outline Drawing

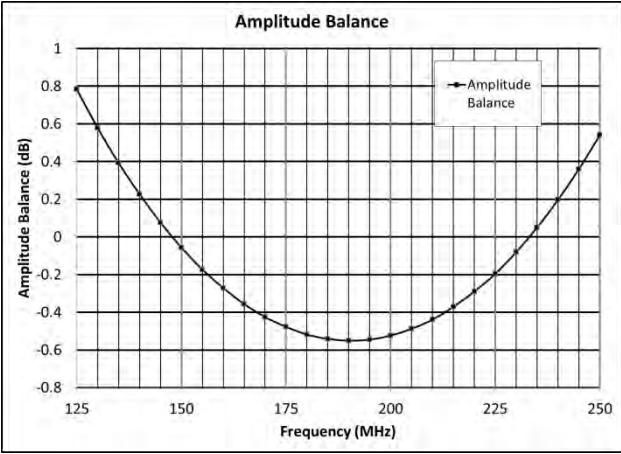
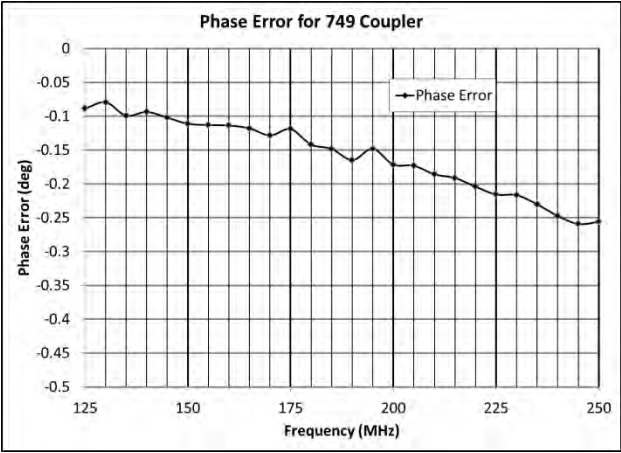
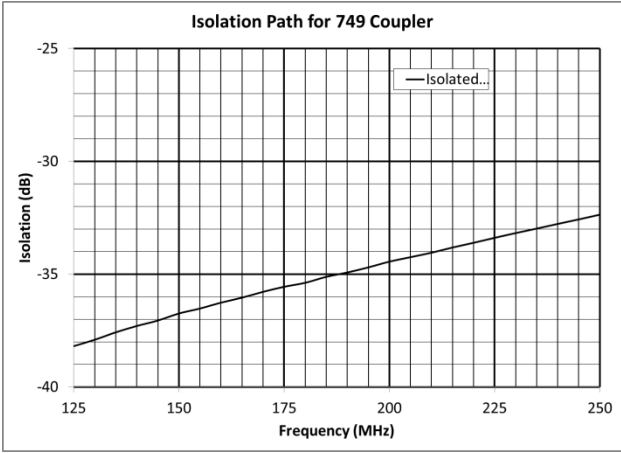
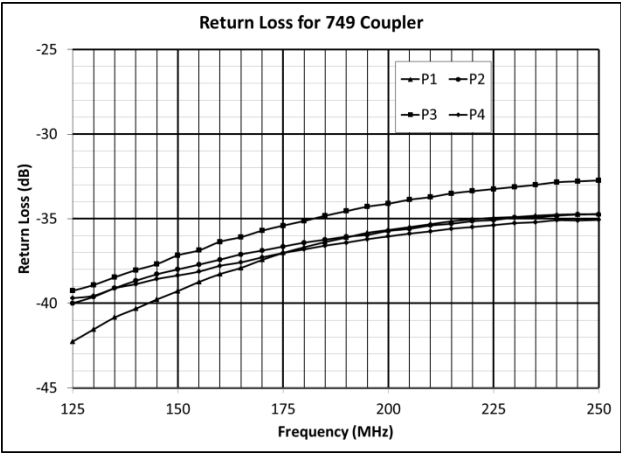
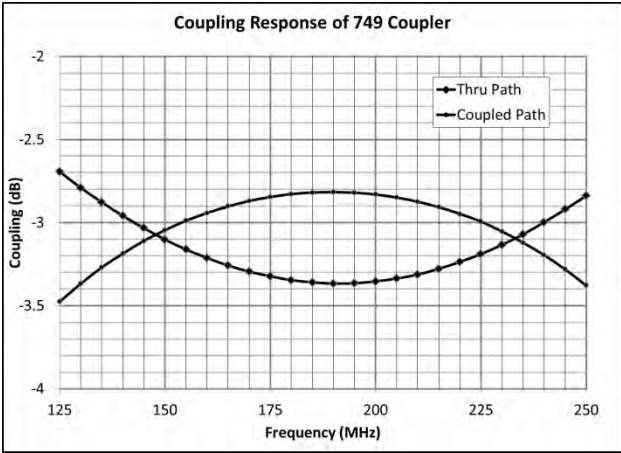


NOTES:

- B dimension for all models is .34"
- C dimension for all models is .10"
- D dimension for all models is 1.38"
- E dimension for all models is .87"
- F dimension for all models is 2.31"
- G dimension for all models is .71"

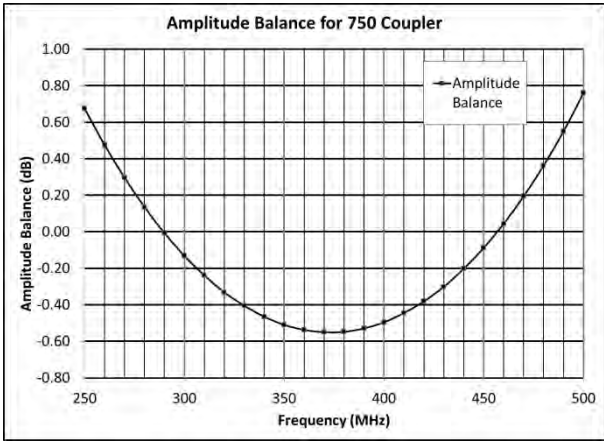
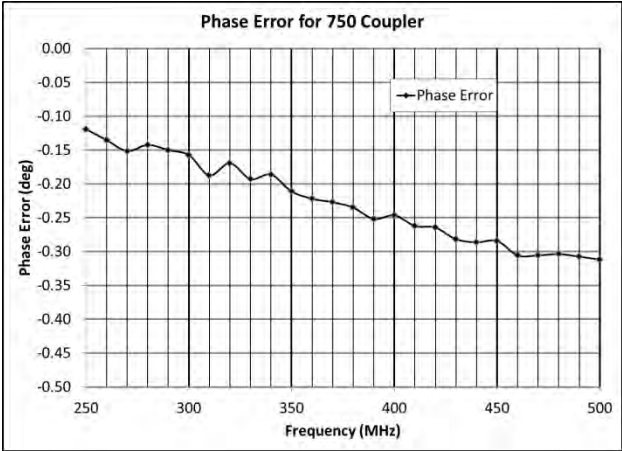
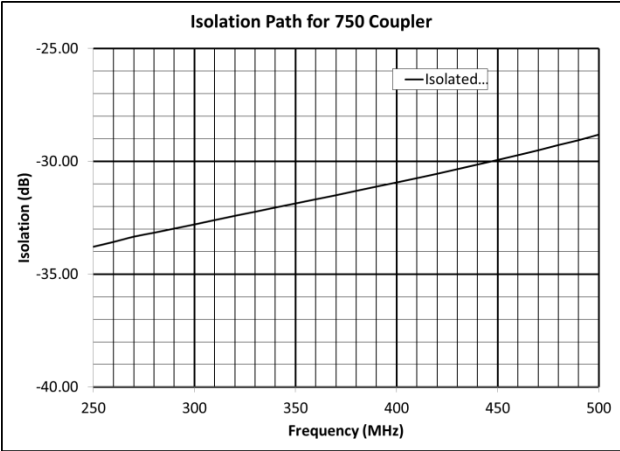
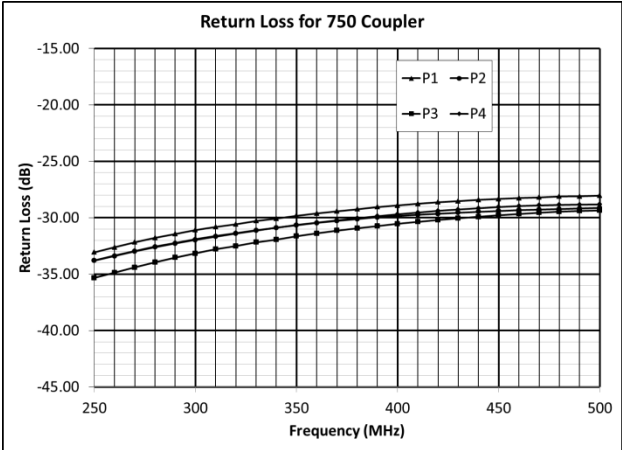
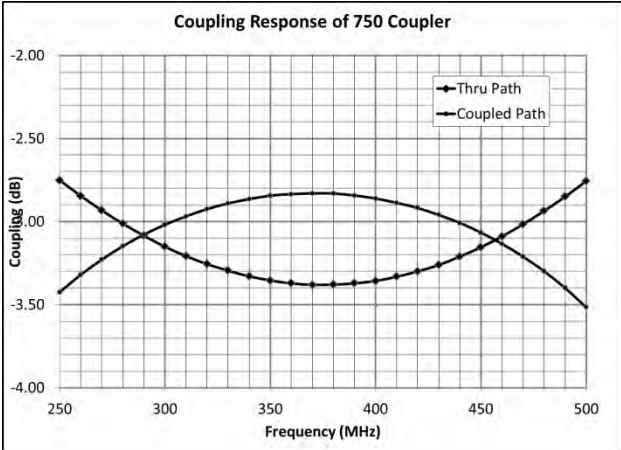
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749 Series – Performance Graphs



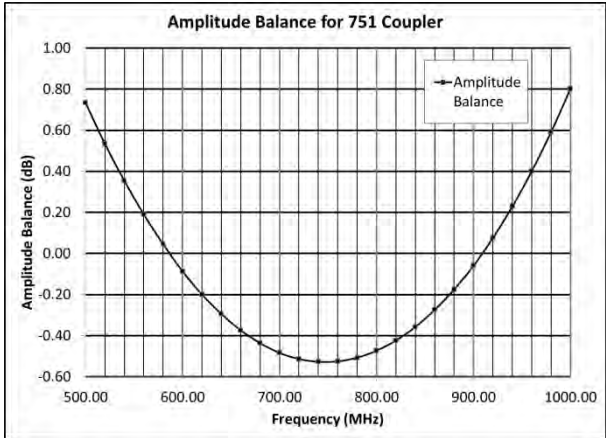
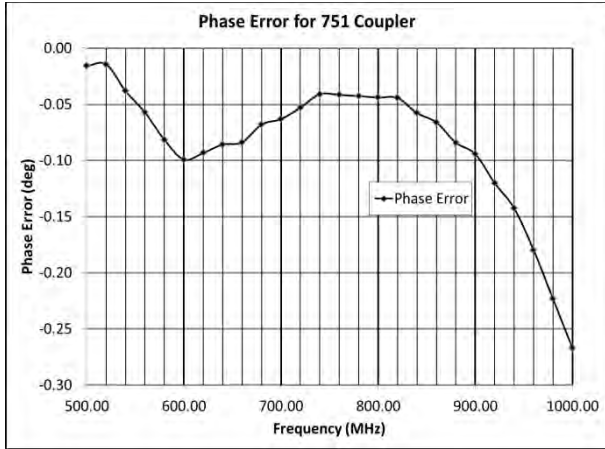
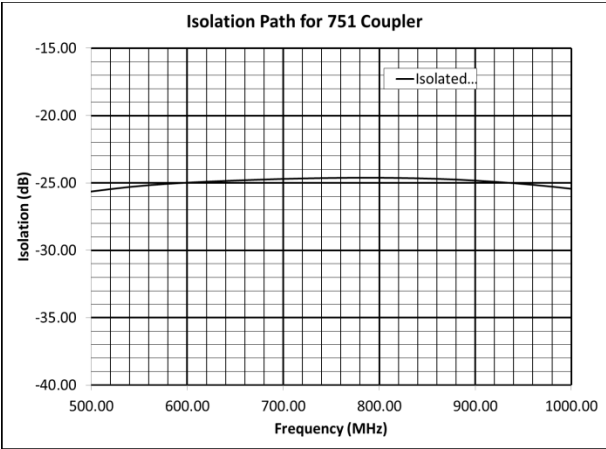
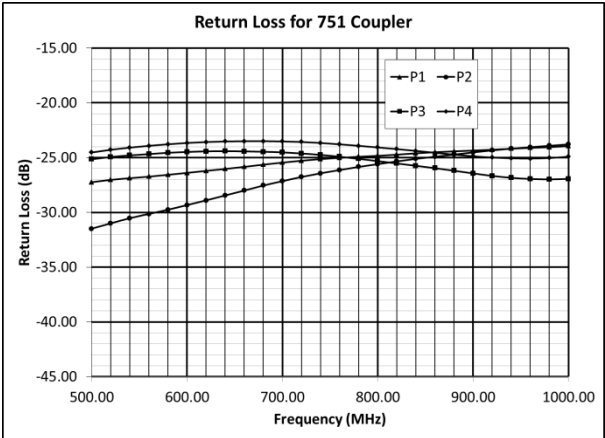
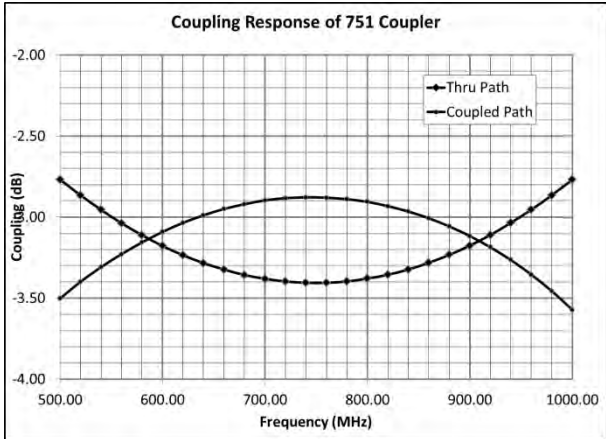
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750 Series – Performance Graphs



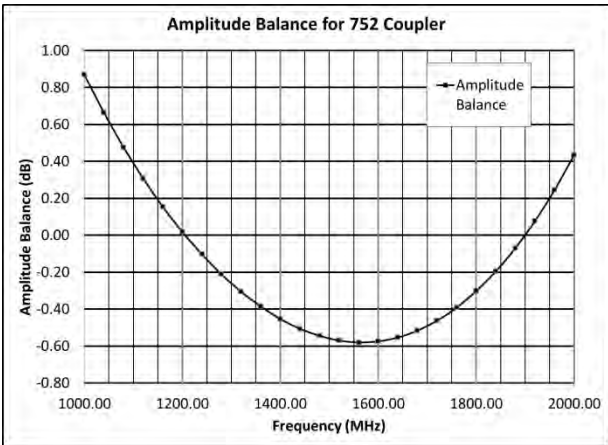
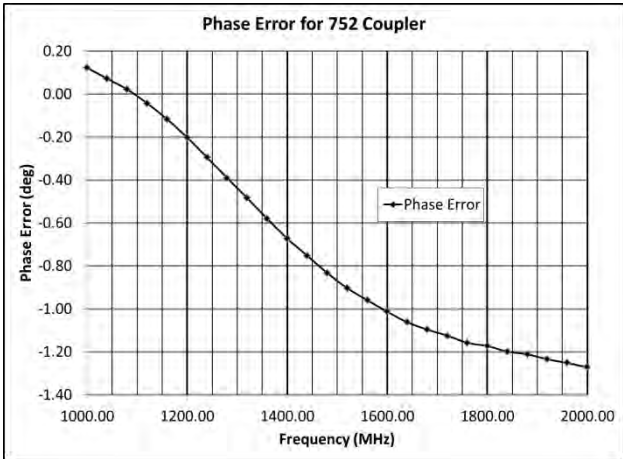
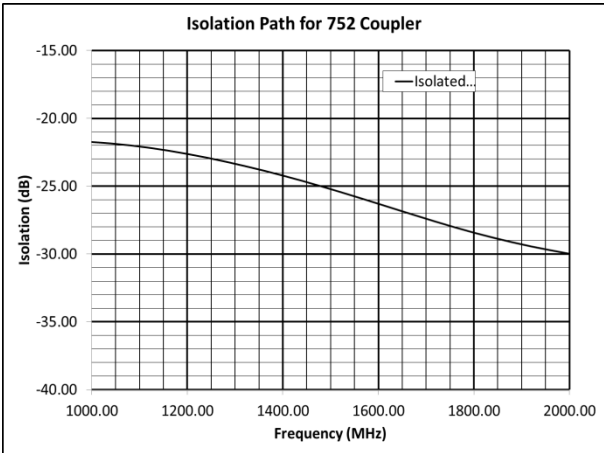
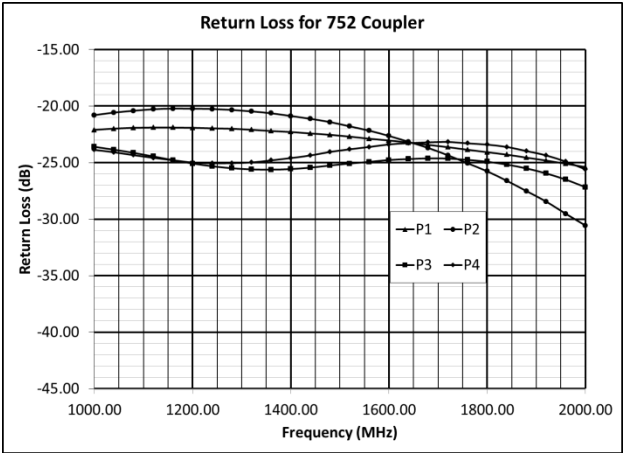
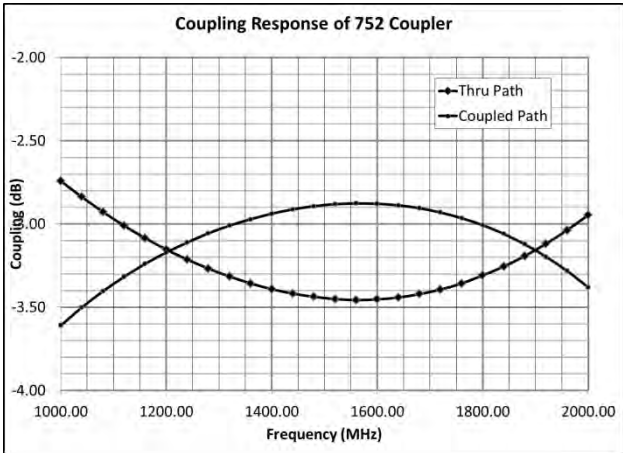
3dB TEMLINE Hybrid Couplers

751 Series – Performance Graphs



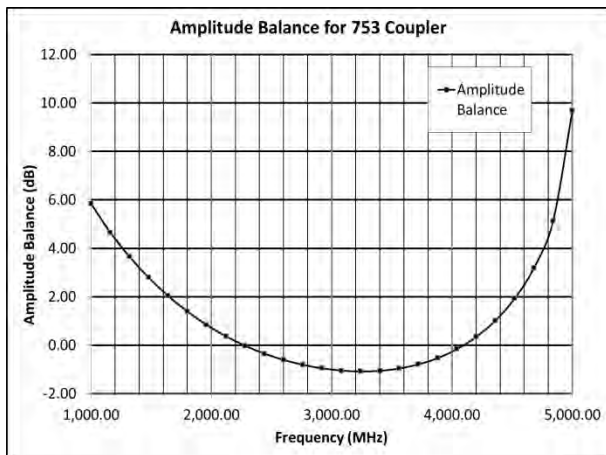
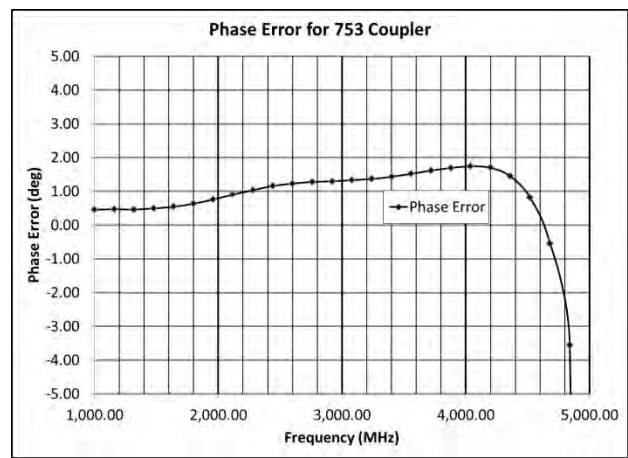
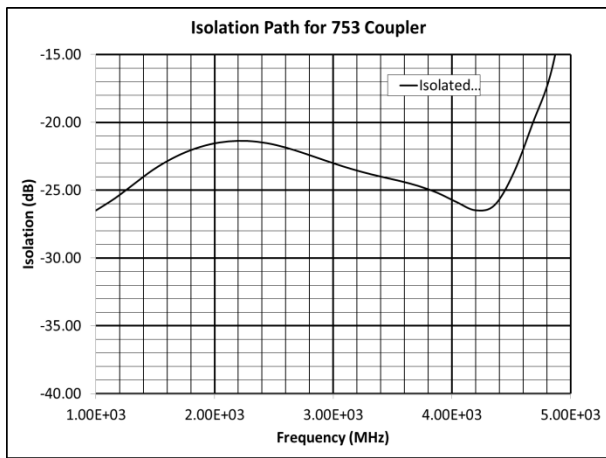
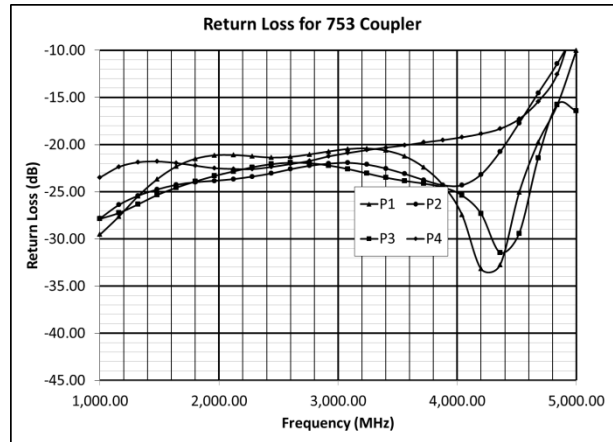
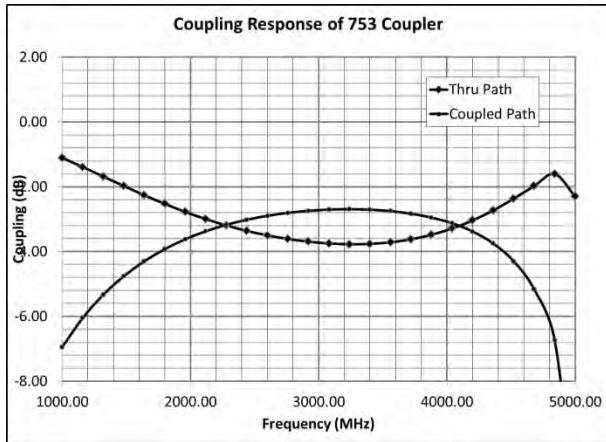
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752 Series – Performance Graphs



3dB TEMLINE Hybrid Couplers

753 Series – Performance Graphs



NOTES:

1. API Technologies "Standard Warranty and Order Terms and Conditions" apply to all orders.
2. All specifications subject to change without notice.
3. Contact our local Manufacturers Representative for pricing.