Engineering Development Model

Diplexer DPLX-EDU1116+

Surface Mount

CASE STYLE : 99-01-1425

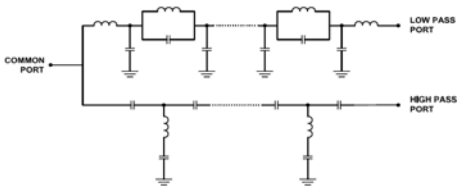
Important Note

This model has been designed, built and tested in our engineering department. Performance data represents model capability.
At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.

Please click "Back", and then click "Contact Us" for Applications support.

ELECTRICAL SPECIFICATIONS 75Ω @ +25°C							
Parameter		**Port**	**Frequency (MHz)**	**Min.**	**Typ.**	**Max.**	**Units**
Passband	**Insertion Loss**	**Lowpass**	**50-800**		0.5	1	dB
			800-1000		1	2.5	dB
		Highpass	**1200-1300**		1	2	dB
	Return Loss	**Lowpass**	**50-1000**	14	22		dB
		Highpass	**1200-1300**	14	22		dB
		Common	**50-1000**	15	22		dB
			1200-1300	15	22		dB
Stop band isolation		**Lowpass**	**1200-1300**	60	75		dB
		Highpass	**50-800**	60	80		dB
			800-1000	60	80		dB
Crossover isolation		**Lowpass to Highpass**	**1000-1200**	24	40		dB

Functional Schematic



MAXIMUM RATINGS	
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C
RF Power Input	250mW

PIN CONNECTIONS	
Highpass port	SMB-F
Lowpass port	SMB-F
Common port	SMB-F

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Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)		CROSS OVER ISOLATION (dB)	RETURN LOSS (dB)		
	Low Pass Port	High Pass Port	Between LPF and HPF	Common Port	Low Pass Port	High Pass Port
50	0.06	85.55	91.90	30.34	30.90	0.02
75	0.08	88.74	91.87	26.88	27.51	0.05
100	0.11	88.45	91.45	24.68	25.30	0.07
200	0.18	87.04	84.83	21.02	21.46	0.22
300	0.22	82.19	84.28	22.11	21.96	0.39
400	0.26	85.76	82.32	28.65	27.94	0.51
500	0.35	86.49	86.13	26.87	27.59	0.50
600	0.42	88.95	91.44	21.03	20.08	0.36
700	0.52	85.85	90.32	20.17	19.67	0.05
800	0.56	87.26	86.33	27.62	28.46	0.36
900	0.83	84.94	81.92	25.24	25.02	0.31
1000	1.63	73.09	70.51	27.03	22.09	1.07
1030	3.88	48.89	49.80	10.78	9.83	1.58
1040	6.64	40.97	45.65	6.31	6.04	1.76
1050	10.45	31.39	42.27	3.86	3.56	2.01
1100	30.26	11.15	43.88	2.46	0.07	2.55
1150	50.55	3.77	57.24	4.31	0.31	4.12
1200	70.31	1.11	72.68	26.31	0.00	21.17
1250	83.12	0.94	82.56	20.19	0.40	20.54
1300	86.10	0.98	84.52	20.25	0.75	21.68

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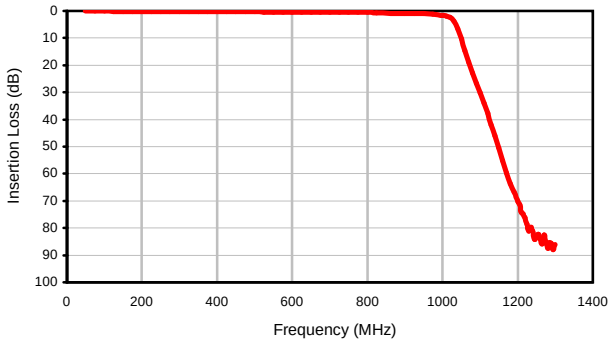
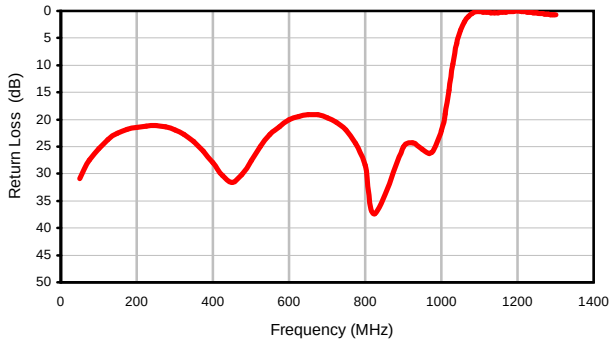
Typical Performance Curves

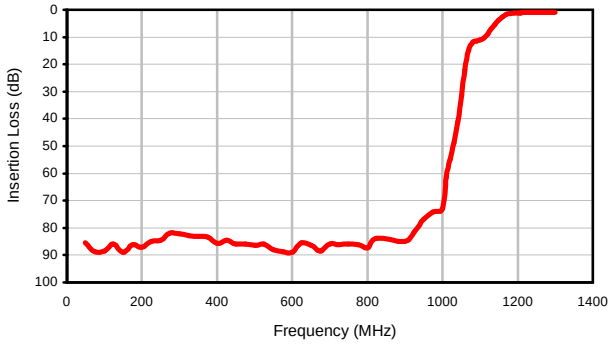
Low Pass Port Insertion Loss



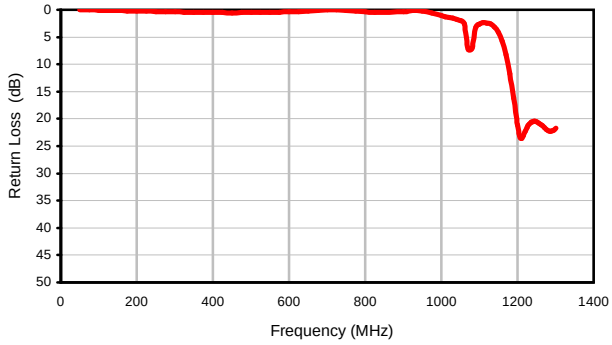
Low Pass Port Return Loss



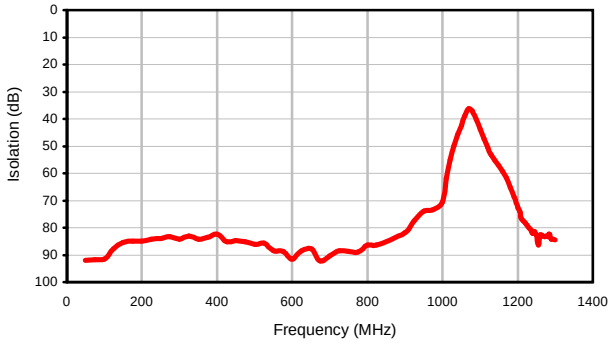
High Pass Port Insertion Loss



High Pass Port Return Loss



Cross Over Isolation



Common Port Return Loss