Engineering Development Model

Diplexer

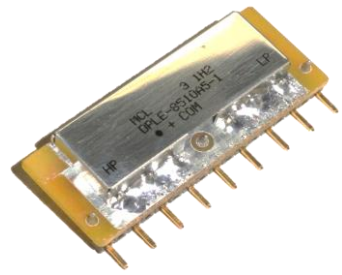
DPLE-EDU2596

PLUG-IN

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.

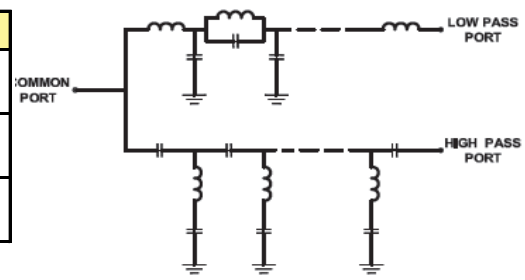


CASE STYLE : 99-01-2411

ELECTRICAL SPECIFICATIONS 75Ω @ +25°C							
Parameter		**Port**	**Frequency (MHz)**	**Min.**	**Typ.**	**Max.**	**Units**
Passband	**Insertion Loss**	**Lowpass**	**5-85**	-	1	1.5	dB
		Highpass	**102-1220**	-	0.8	1.5	dB
	Return Loss	**Lowpass**	**5-85**	20	24	-	dB
		Highpass	**102-1220**	18	24	-	dB
		Common	**5-85**	20	24	-	dB
			102-1220	18	24	-	dB
Cross over isolation			**5-80**	50	55	-	dB
			80-85	45	50	-	dB
			85-102	-	10	-	dB
			102-108	42	50	-	dB
			108-250	45	50	-	dB
			250-1220	40	45	-	dB

MAXIMUM RATINGS	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1W

Functional Schematic



PIN CONNECTIONS	
Highpass port	9
Lowpass port	1
Common port	5
Ground	2,3,4,6,7,8

Case style size	1.730"X0.545"X0.840

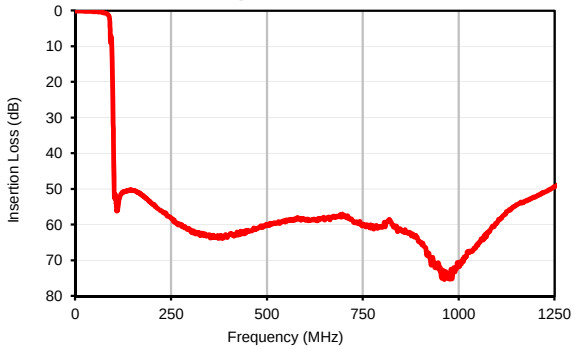
PLUG-IN Diplexer DPLE-EDU2596

Typical Performance Data

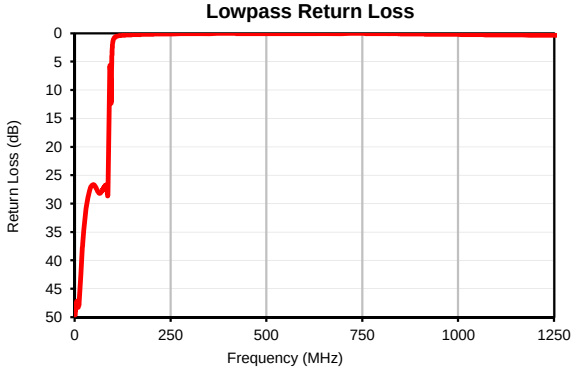
FREQUENCY	INSERTION LOSS		Cross over isolation	RETURN LOSS		
(MHz)	(dB)		(dB)	(dB)		
	Lowpass port	Highpass port	(between LPF and HPF)	Common port	Lowpass port	Highpass port
1	0.06	83.44	79.11	48.31	49.59	0.05
5	0.09	67.85	67.20	43.14	47.19	0.04
40	0.21	59.96	60.06	25.35	27.36	0.05
85	1.05	51.94	51.29	31.74	28.22	0.72
88	1.57	31.86	33.59	23.13	21.56	1.10
89	2.02	24.67	27.17	17.11	16.34	1.40
90	3.07	17.35	20.71	12.28	11.30	2.06
95	9.09	3.50	12.47	21.69	11.89	11.49
97	19.56	1.91	21.35	32.27	3.36	22.10
98	26.28	1.61	27.51	25.38	2.12	23.05
99	33.15	1.43	34.31	23.59	1.53	22.60
102	52.52	1.10	59.21	25.96	0.88	24.86
108	55.92	0.78	54.16	35.89	0.54	36.71
120	51.25	0.53	52.71	26.88	0.37	27.50
250	58.24	0.21	57.60	35.74	0.08	31.48
500	60.10	0.22	60.56	25.77	0.04	26.01
950	72.78	0.29	75.97	38.97	0.16	30.01
1000	70.69	0.31	63.80	39.93	0.18	31.07
1100	59.46	0.35	54.83	32.90	0.27	36.89
1218	51.00	0.40	48.81	26.53	0.33	26.51

Typical Performance Curves

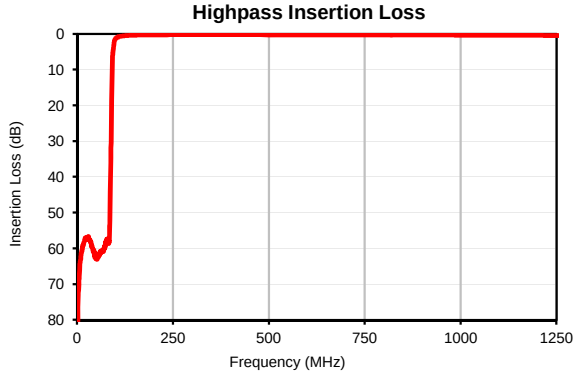
Lowpass Insertion Loss



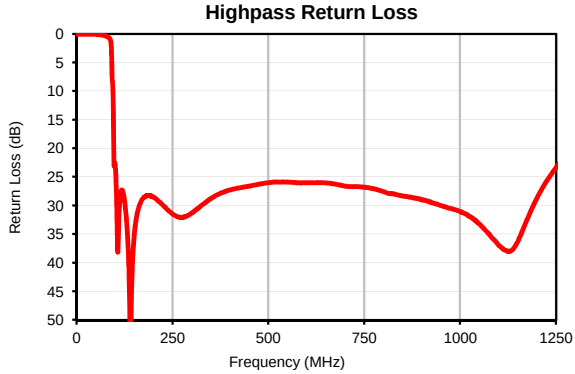
Lowpass Return Loss



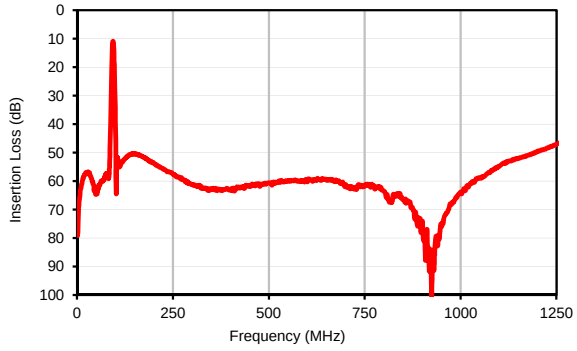
Highpass Insertion Loss



Highpass Return Loss



Crossover Isolation



Common Port Return Loss