Engineering Development Model

Diplexer

DPLC-EDU2764+

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 : QB2223

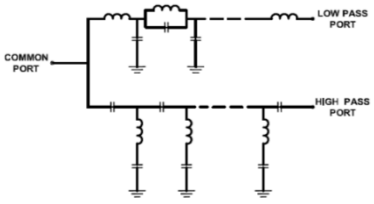
ELECTRICAL SPECIFICATIONS 75Ω @ +25°C							
Parameter		**Port**	**Frequency (MHz)**	**Min.**	**Typ.**	**Max.**	**Units**
Passband	Insertion Loss	Lowpass	5	-	-	0.20	dB
			85	-	-	1.3	dB
		Highpass	102	-	-	1.75	dB
			105	-	-	1.3	dB
			130	-	-	0.6	dB
			870	-	-	0.50	dB
			1000	-	-	0.55	dB
			1218	-	-	0.60	dB
			1225	-	-	0.65	dB
	Flatness (Deviation from best fit line)	Lowpass	5-85	-	-	0.65	dB
		Highpass	120-1225	-	-	0.40	dB
	Return Loss	Lowpass	5-85	22.00	24.00	-	dB
		Highpass	102-104.9	22.00	24.00	-	dB
			105-1225	22.00	24.00	-	dB
		Common	5-85	22.00	24.00	-	dB
			102-104.9	22.00	24.00	-	dB
			105-1225	22.00	24.00	-	dB
Stop Band Isolation		Highpass	5-84.9	50.00	-	-	dB
			85-104.9	40.00	-	-	dB
		Lowpass	105-1225	43.00	50.00	-	dB
Group Delay		Highpass	109.275-112.855	-	-	10.00	ns
			115.275-118.855	-	-	8.00	ns
			121.2625-124.843	-	-	6.00	ns
		Lowpass	82-83.5	-	-	6.00	ns
			83.5-85	-	-	8.00	ns

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

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

Case style size	1.243" X 1.117" X 0.630"

Functional Schematic



+RoHS Compliant

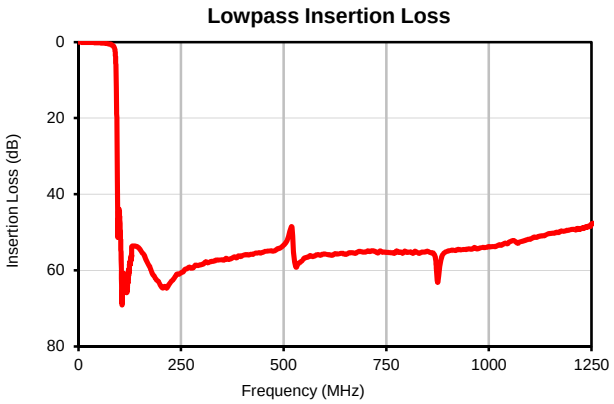
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

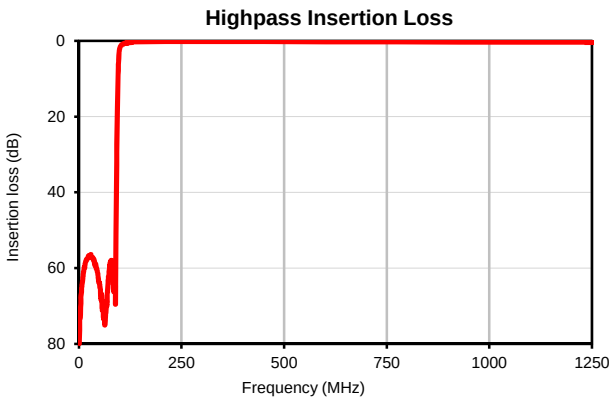
Plug-In Diplexer DPLC-EDU2764+

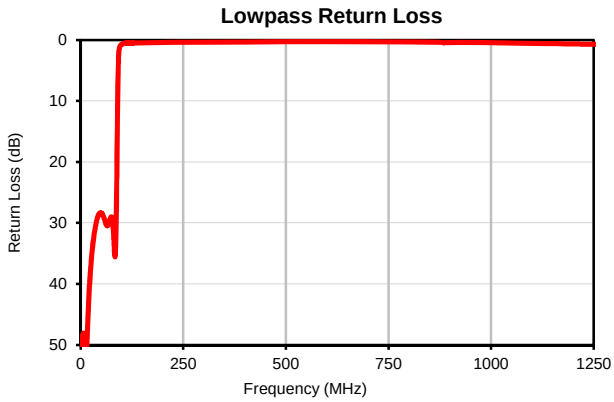
Typical Performance Data

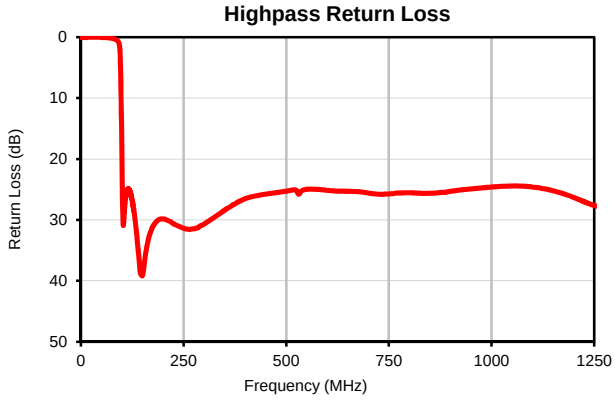
FREQUENCY	INSERTION LOSS		Cross over isolation	RETURN LOSS		
(MHz)	(dB)		(dB)	(dB)		
	Lowpass port	Highpass port	(between LPF and HPF)	Common port	Lowpass port	Highpass port
1.000	0.04	79.91	78.87	52.06	53.73	0.08
5.000	0.07	67.51	68.01	44.65	48.43	0.06
50.000	0.23	63.85	64.15	28.28	28.34	0.05
82.000	0.80	60.37	59.32	34.35	34.35	0.31
83.500	0.90	62.96	60.65	32.67	35.55	0.35
84.900	1.04	65.72	60.97	29.55	34.29	0.40
85.000	1.06	64.83	61.31	28.91	34.13	0.40
90.000	3.41	54.62	52.69	10.04	10.22	0.66
92.000	10.47	31.63	44.44	4.98	3.24	0.88
93.500	20.97	19.93	44.80	4.16	1.63	1.23
94.000	25.61	16.75	46.18	4.21	1.41	1.44
94.500	31.17	13.85	48.31	4.41	1.26	1.73
95.000	38.13	11.25	51.54	4.82	1.14	2.16
96.000	51.34	7.06	52.36	6.48	0.99	3.67
97.000	47.00	4.36	46.82	9.61	0.88	6.41
98.000	44.40	2.91	45.00	14.13	0.80	10.35
99.000	43.95	2.17	45.17	19.74	0.74	15.08
100.000	45.12	1.76	46.51	26.12	0.70	20.15
102.000	49.94	1.34	51.29	36.60	0.63	29.13
103.000	53.10	1.20	54.62	38.82	0.61	30.81
104.000	57.02	1.09	59.10	39.05	0.59	30.53
104.900	62.64	1.01	66.45	36.35	0.57	29.66
105.000	63.99	0.99	69.03	35.60	0.57	29.56
109.000	62.50	0.78	63.83	27.65	0.53	26.31
109.275	62.64	0.77	63.87	27.46	0.53	26.19
112.855	62.52	0.65	64.07	25.13	0.51	25.07
115.275	64.69	0.59	68.34	24.71	0.50	24.93
118.855	64.27	0.52	69.18	25.09	0.49	25.24
120.000	63.15	0.51	66.46	25.36	0.48	25.45
121.263	61.55	0.48	63.95	25.75	0.48	25.73
124.843	58.64	0.44	59.08	27.23	0.48	26.79
130.000	53.70	0.32	53.47	40.97	0.47	28.98
250.000	60.62	0.18	62.21	38.58	0.38	31.37
500.000	53.36	0.21	52.53	26.82	0.30	25.26
870.000	56.92	0.31	48.91	24.61	0.36	25.54
1000.000	53.76	0.33	53.73	26.71	0.45	24.61
1150.000	50.31	0.37	51.82	26.79	0.60	25.23
1200.000	49.30	0.39	50.79	25.77	0.65	26.33
1218.000	49.16	0.39	50.57	25.49	0.67	26.82
1225.000	49.06	0.39	50.42	25.30	0.67	27.01

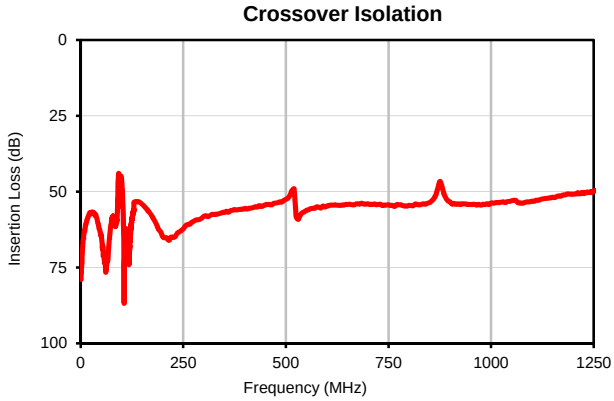
Typical Performance Curves

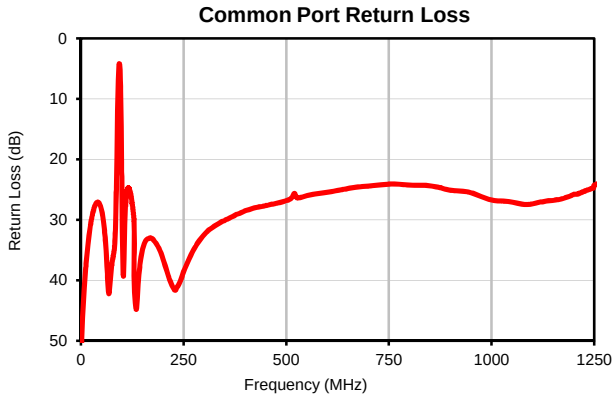








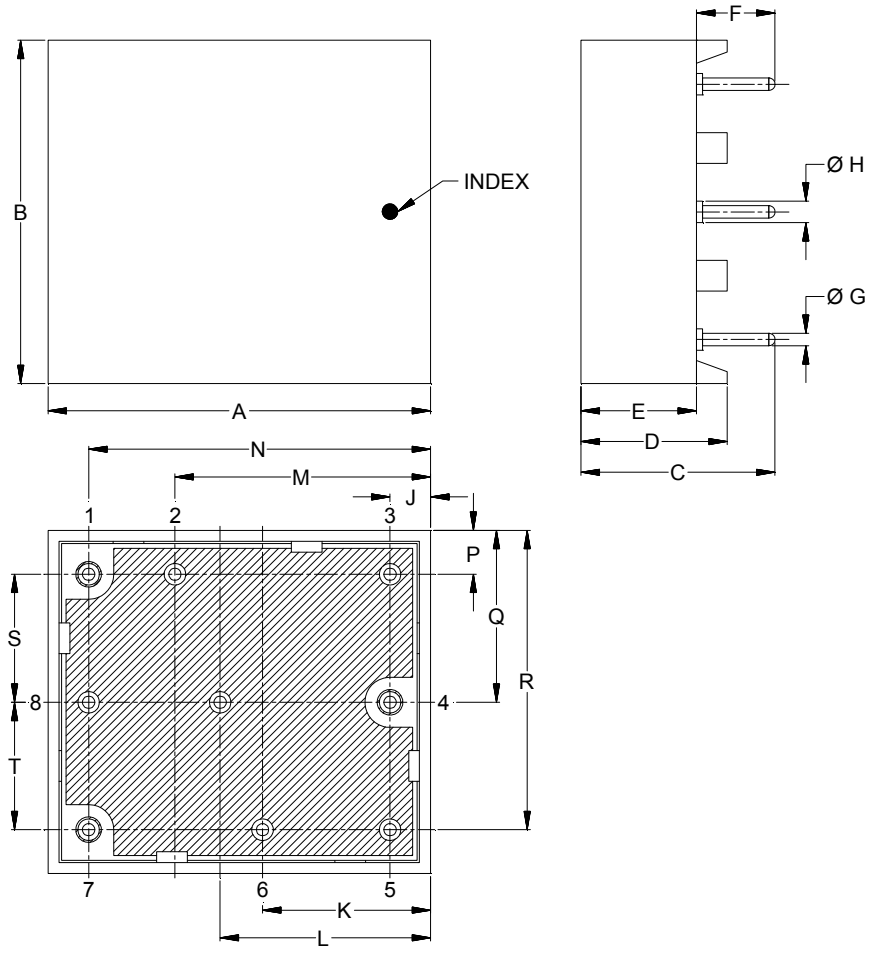




Case Style QB

Outline Dimensions

QB2223



CASE#	A	B	C	D	E	F	G	H	J	K
QB2223	1.243 (31.56)	1.117 (28.36)	.630 (16.00)	.475 (12.07)	.375 (9.53)	.255 (6.48)	.040 (1.02)	.070 (1.78)	.132 (3.35)	.546 (13.87)

CASE#	L	M	N	P	Q	R	S	T	WT.GRAMS
QB2223	.684 (17.37)	.831 (21.10)	1.111 (28.22)	.143 (3.63)	.559 (14.21)	.974 (24.74)	.417 (10.58)	.415 (10.53)	7

Dimensions are in inches (mm). Tolerances: 2 Pl. ± .015; 3 Pl. ± .030

Notes:

1. Cover material: Fortan PPS
2. Pin material: Brass alloy [C3604]
3. Pin finish: Gold flash
4. Tolerance on pin diameter +/-.001
5. Base: Printed wiring laminate.