

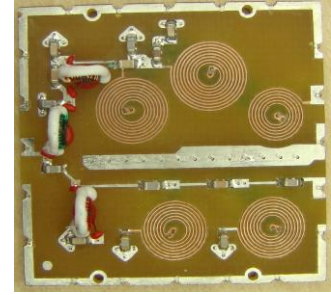
Diplexer Surface Mount

DPLX-EDU1481

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.

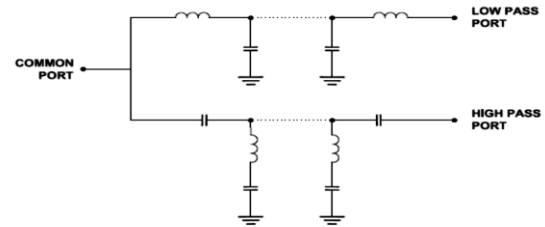
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CASE STYLE : HR1176

ELECTRICAL SPECIFICATIONS 75Ω @ +25°C							
Parameter		Port	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Insertion Loss	Lowpass	5-65		1	1.5	dB
		Highpass	88-1000		1	1.5	dB
	Return Loss	Lowpass	5-65	13	18		dB
		Highpass	88-1000	13	18		dB
		Common	5-65	13	18		dB
			88-1000	13	18		dB
Stop band isolation		Lowpass	88-1000	35	40		dB
		Highpass	5-65	35	40		dB

Functional Schematic



MAXIMUM RATINGS	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.3W

PIN CONNECTIONS	
Highpass port	7
Lowpass port	9
Common port	18
Ground	1,2,3,4,5,6,8,10,11,12,13,14,15,16,17,19,20

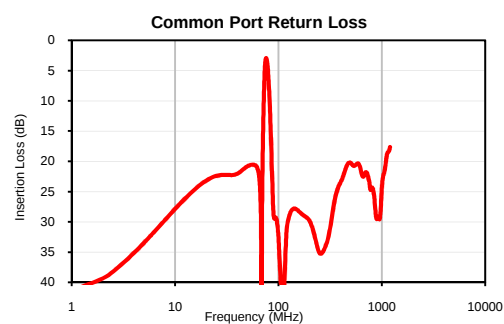
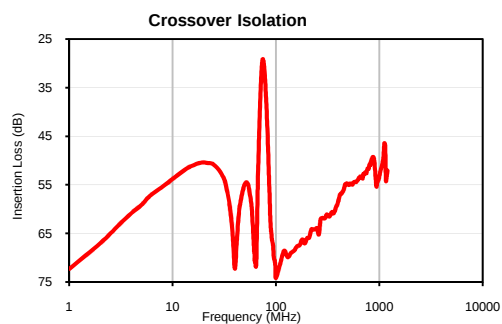
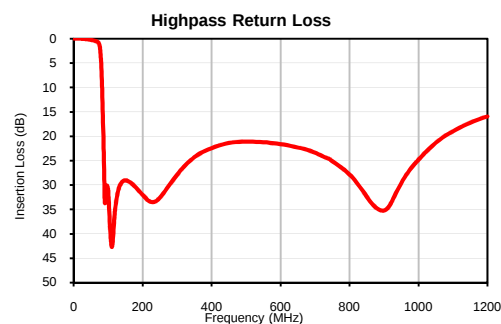
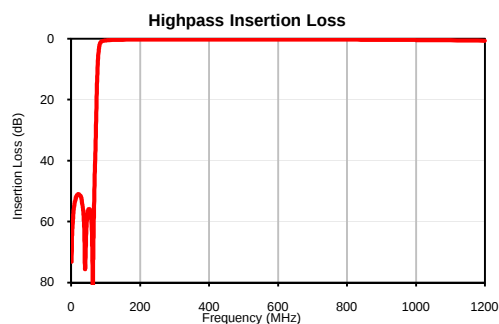
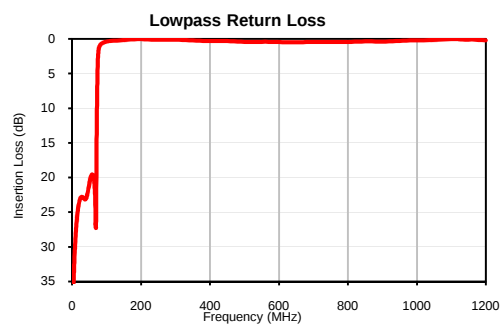
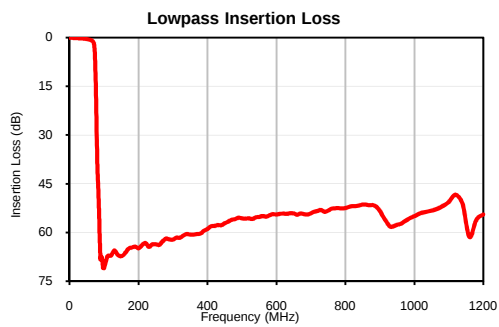
Typical Performance Data

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	0.07	73.12	72.31	41.34	41.76	0.00
5	0.09	59.35	59.15	33.46	34.02	0.00
20	0.19	50.93	50.40	23.18	23.68	0.03
40	0.33	75.41	72.28	22.04	23.07	0.16
56	0.60	56.64	57.02	20.54	19.67	0.36
65	0.96	63.73	68.02	22.53	21.10	0.54
71	2.13	33.33	35.34	14.81	15.14	0.77
72	3.01	28.27	32.39	9.96	10.15	0.85
77	20.36	8.31	31.01	3.17	1.49	2.42
79	31.66	4.72	34.40	4.88	1.11	4.43
85	52.31	1.16	51.43	17.37	0.70	17.14
90	67.98	0.75	64.72	29.12	0.54	33.39
100	70.98	0.52	74.17	32.56	0.38	31.15
250	63.64	0.22	63.96	35.19	0.12	32.57
400	58.94	0.26	58.42	23.42	0.28	22.42
750	53.29	0.26	52.64	23.10	0.45	25.10
900	53.38	0.31	50.55	29.49	0.38	35.23
1000	55.00	0.38	53.28	24.51	0.20	24.82
1100	50.62	0.48	48.96	19.83	0.02	19.00
1200	54.45	0.59	52.07	17.64	0.19	15.95

Surface Mount Diplexer

Typical Performance Curves

DPLX-EDU1481



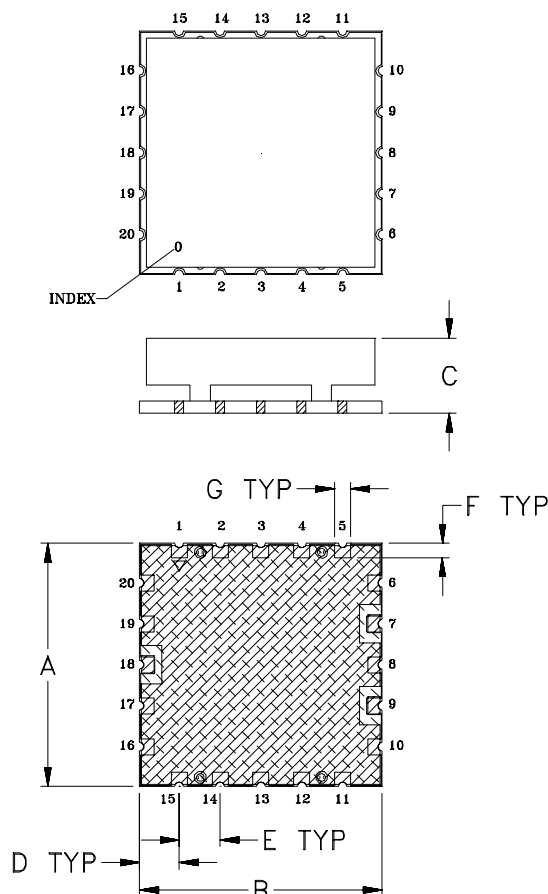
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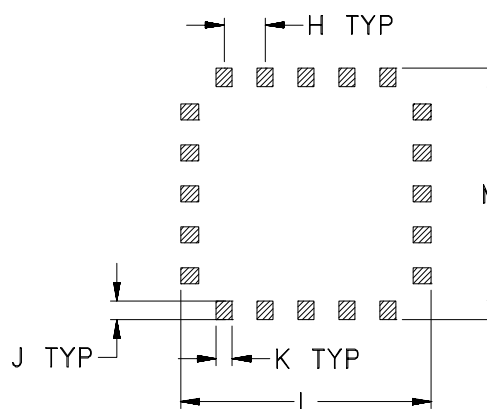
REV. 1
 DPLX-EDU1481
 URJ
 151230
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Outline Dimensions

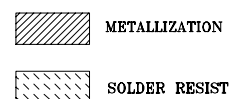
HR1176



PCB Land Pattern



Suggested Layout,
Tolerance to be within ± 0.002



CASE#	A	B	C	D	E	F	G	H	J	K	L	M	WT. GRAM
HR1176	1.200 (30.48)	1.200 (30.48)	.370 (9.40)	.196 (4.98)	.202 (5.13)	.071 (1.80)	.079 (2.01)	.202 (5.13)	.091 (2.31)	.079 (2.01)	1.240 (31.50)	1.240 (31.50)	8.5

Dimensions are in inches (mm). Tolerances: 2Pl. $\pm .03$; 3Pl. $\pm .015$

Notes:

- Case material: Nickel-Silver alloy.
- Base: Printed wiring laminate.
- Termination finish:

For RoHS Case Styles: 3-5 μ inch Gold over 120-240 μ inch Nickel plate.

For RoHS-5 Case Styles: Tin-Lead plate.



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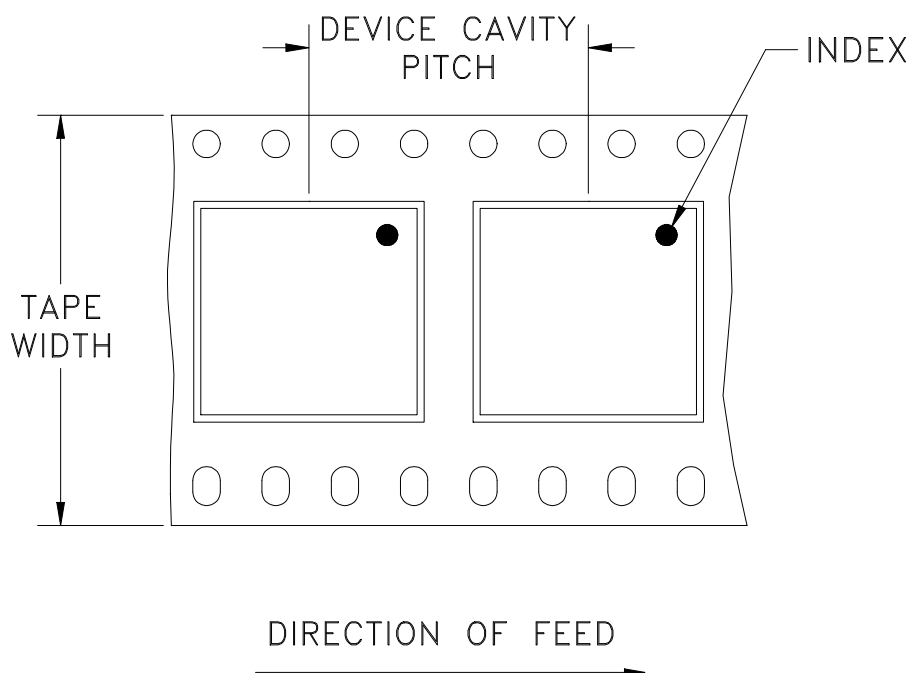
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RF/IF MICROWAVE COMPONENTS



Tape & Reel Packaging TR-F80

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel
44	40	13	100

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