

Diplexer

Surface Mount

DPLX-EDU1407-1+

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 : HR1176

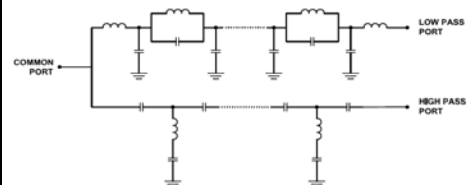
ELECTRICAL SPECIFICATIONS 75Ω @ +25°C

Parameter		Port	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Insertion Loss	Lowpass	5-65		0.5	1.5	dB
		Highpass	88-1000		0.5	1.5	dB
	Return Loss	Lowpass	5-65	17	25		dB
		Highpass	88-1000	12	22		dB
		Common	5-65	17	25		dB
			88-1000	12	22		dB
Stop band isolation		Lowpass	5-65	40	60		dB
		Highpass	88-1000	40	60		dB
Crossover isolation		Lowpass to Highpass	65-88	15	40		dB

MAXIMUM RATINGS

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	20dBm

Functional Schematic



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

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Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)		CROSS OVER ISOLATION (dB) Between LPF and HPF	RETURN LOSS (dB)		
	Low Pass Port	High Pass Port		Common Port	Low Pass Port	High Pass Port
1	0.07	78.17	78.71	43.78	44.09	0.00
5	0.09	64.72	64.64	35.73	36.26	0.00
15	0.15	57.67	57.42	27.80	29.05	0.01
35	0.28	67.98	72.74	24.68	26.64	0.00
55	0.55	64.88	62.43	22.34	21.29	0.25
65	1.01	60.83	53.61	21.23	20.73	0.60
69	2.27	38.61	37.78	11.58	10.53	0.85
70	3.14	36.91	35.06	9.02	7.97	0.93
73	8.33	24.76	30.54	3.99	2.75	1.33
76	17.60	9.49	30.71	3.79	1.06	2.98
77	21.96	6.29	32.06	5.04	0.85	4.47
79	32.93	2.76	37.70	10.25	0.63	9.94
81	43.05	1.62	46.85	19.48	0.51	19.23
88	53.93	0.86	54.46	20.20	0.29	21.78
100	61.97	0.53	60.27	22.23	0.16	22.62
200	83.00	0.22	82.07	26.72	0.28	23.25
400	64.49	0.27	63.51	17.63	0.33	17.37
600	62.76	0.39	61.82	17.55	0.24	17.61
800	61.36	0.34	60.85	22.65	0.07	23.18
1000	58.41	0.35	56.54	26.02	0.01	27.19

REV. X1

DPLX-EDU1407-1+

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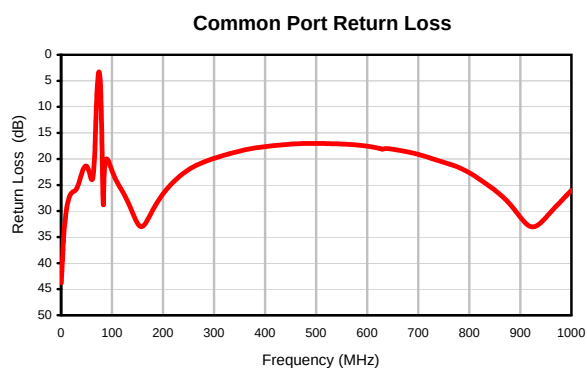
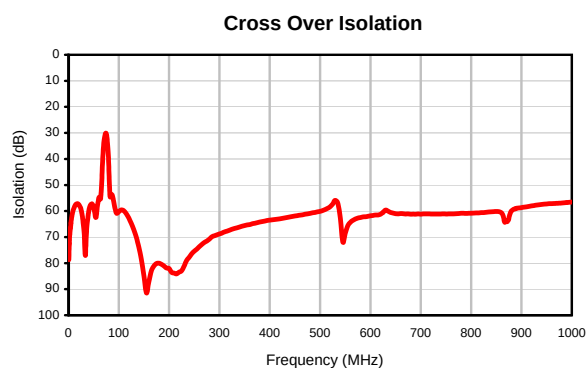
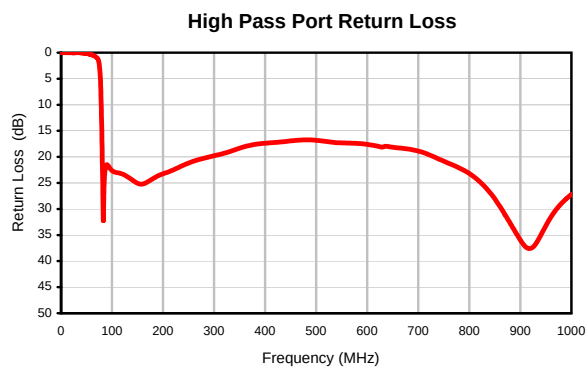
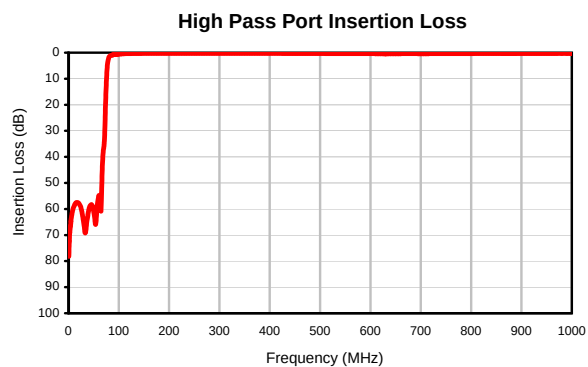
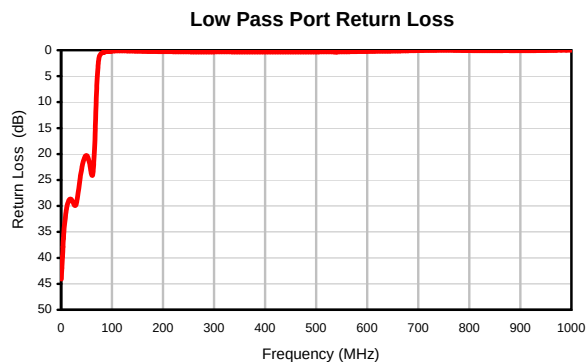
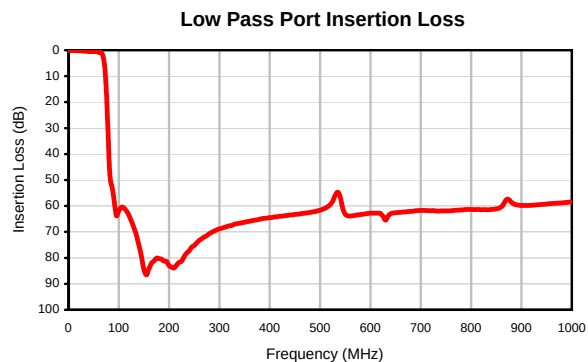
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Typical Performance Curves

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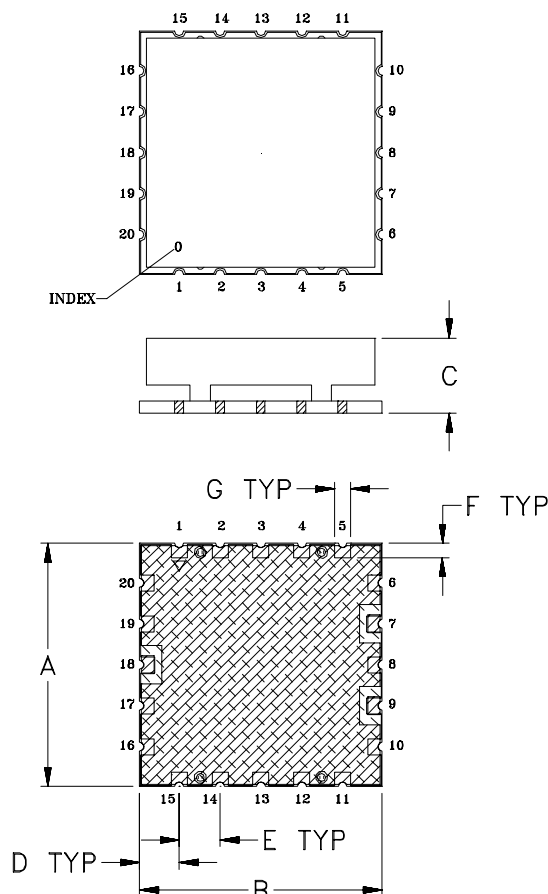


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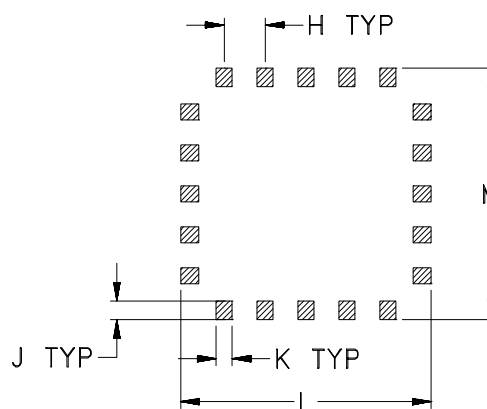


Outline Dimensions

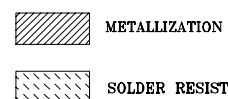
HR1176



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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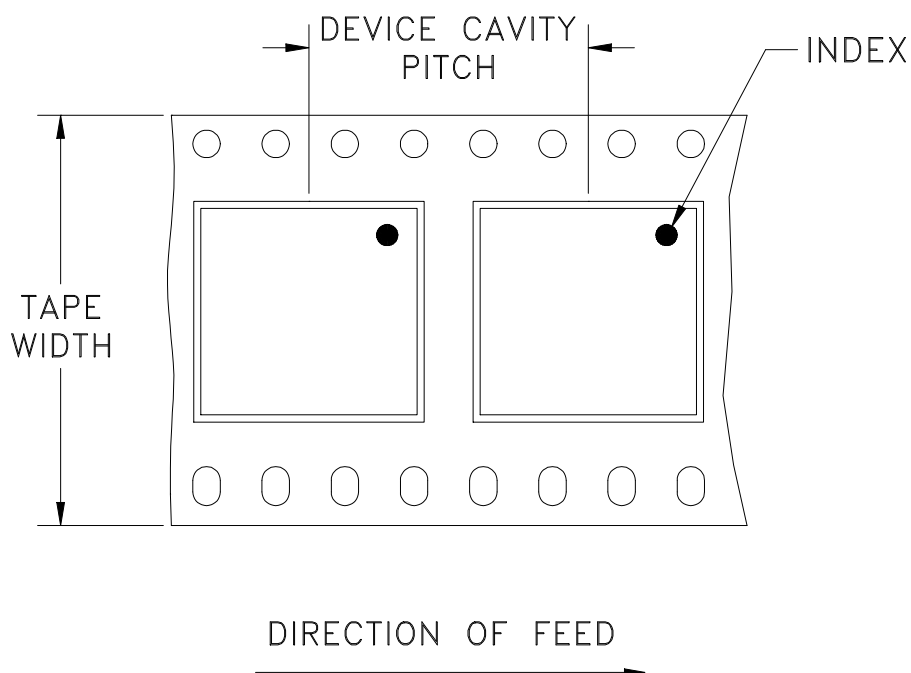
Provides ACTUAL Data Instantly From MINI-CIRCUITS At: www.minicircuits.com

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

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

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