

Engineering Development Model

Dual Low Pass Filter

Surface Mount

DLPF-EDU1159

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.



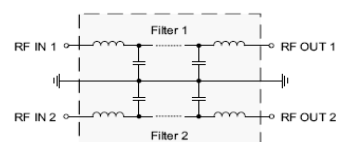
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CASE STYLE: HU1186

Electrical Specifications 50Ω @ +25°C				
Parameter	Min	Typ	Max	Units
Passband (Loss < 1 dB)	DC	-	12	MHz
Stopband (Loss > 20 dB)	20	-	50	MHz
Stopband (Loss > 40 dB)	50	-	1500	MHz
Passband VSWR		1.1	1.4	:1
Group Delay variation b/w 2 filters @ 12 MHz		1		nS

Functional Schematic

MAXIMUM RATINGS	
Operating Temperature	-40°C to +60°C
Storage Temperature	-55°C to +85°C
RF Power Input	0.5 W



PIN CONNECTIONS	
RF IN 1	2 (filter1)
RF OUT 1	13 (filter1)
RF IN 2	6 (filter2)
RF OUT 2	9 (filter2)
GROUND	1,3,4,5,7,8,10,11,12,14

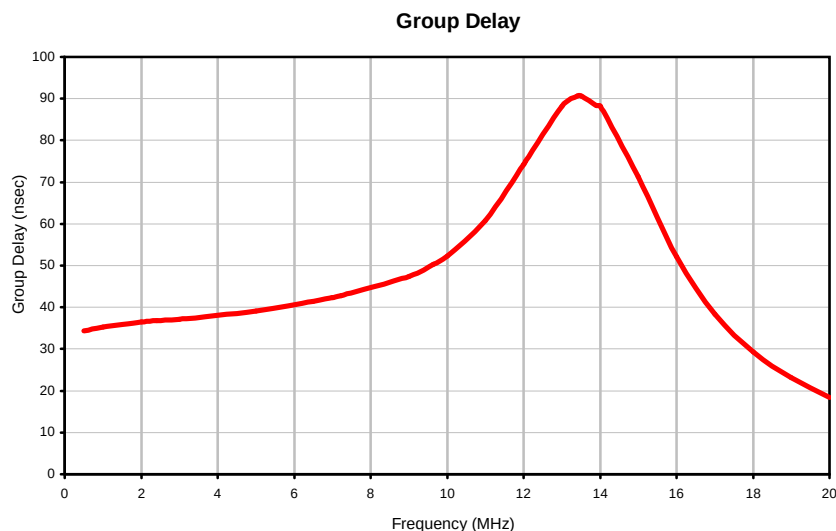
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Typical Performance Data

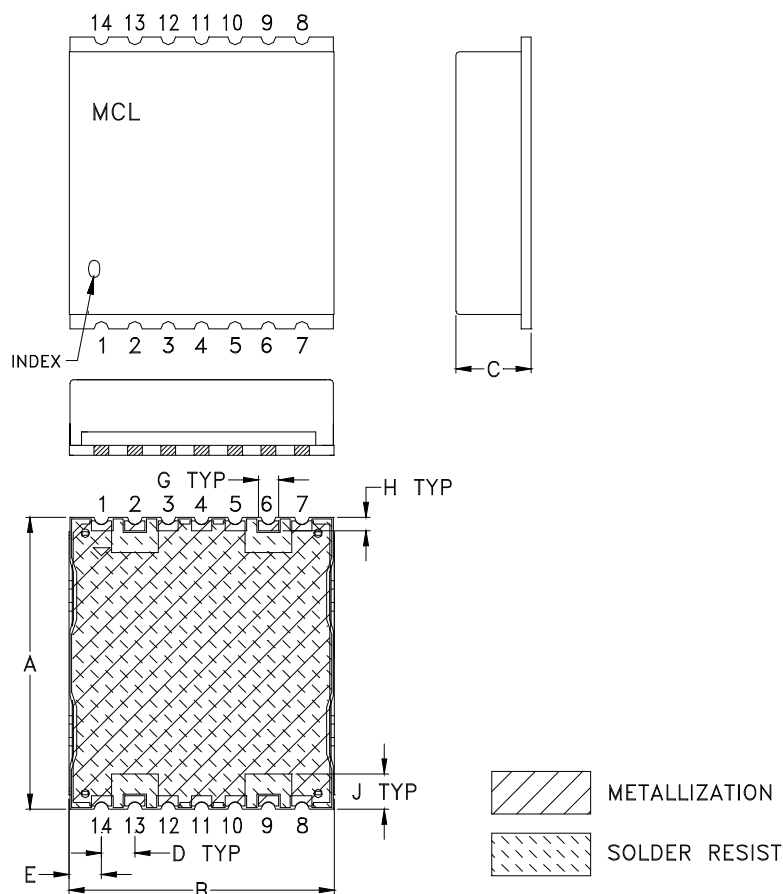
FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
0.5	0.23	31.52	0.5	34.42
1.0	0.24	30.41	1.0	35.28
2.0	0.25	28.77	2.0	36.47
3.0	0.26	28.33	2.4	36.79
5.0	0.28	33.86	3.0	37.17
7.0	0.32	28.22	5.0	39.14
9.0	0.40	20.98	6.5	41.41
10.0	0.42	21.19	7.0	42.32
11.0	0.44	27.89	7.2	42.77
12.0	0.53	20.19	9.0	47.46
13.0	1.12	9.49	9.6	50.31
14.0	3.00	4.24	10.0	52.30
15.0	6.43	1.94	11.0	60.67
16.0	10.68	1.07	12.0	74.17
17.0	15.14	0.73	12.1	74.98
18.0	19.66	0.58	13.0	88.14
19.0	24.30	0.50	13.4	90.66
20.0	29.29	0.45	13.5	90.66
21.0	35.10	0.41	13.9	88.35
22.0	43.16	0.38	14.0	88.15
23.0	67.53	0.35	15.0	71.33
24.0	47.46	0.33	16.0	52.15
25.0	43.17	0.31	17.0	38.33
26.0	41.33	0.29	18.0	29.34
27.0	40.43	0.27	19.0	23.16
28.0	40.03	0.26	20.0	18.37
29.0	39.92	0.25		
30.0	39.99	0.24		
35.0	41.58	0.19		
40.0	43.88	0.16		
45.0	46.19	0.13		
50.0	48.47	0.12		
60.0	52.61	0.09		
70.0	56.25	0.07		
80.0	59.48	0.06		
90.0	62.30	0.06		
100.0	64.72	0.05		
150.0	74.52	0.04		
200.0	79.70	0.04		
300.0	85.28	0.05		
400.0	87.08	0.06		
500.0	88.58	0.08		
700.0	82.34	0.12		
1000.0	82.45	0.27		
1200.0	70.64	0.24		
1500.0	56.12	0.42		
1700.0	43.52	5.52		
2000.0	53.91	0.47		
2200.0	47.69	0.45		
2500.0	40.21	0.51		
2700.0	34.11	0.57		
3000.0	21.79	1.42		
3200.0	17.98	5.35		
3500.0	35.11	1.70		

Typical Performance Curves

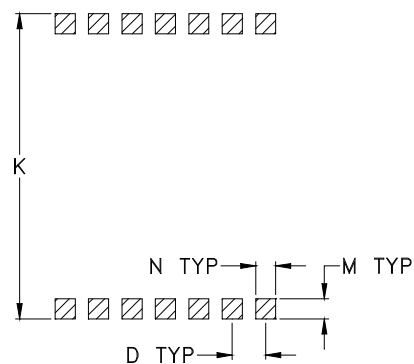


Outline Dimensions

HU1186



PCB Land Pattern



Suggested Layout,
Tolerance to be within ± 0.002

CASE#	A	B	C	D	E	F	G	H	J	K	L	M	N	P	WT, GRAM
HU1186	.870 (22.10)	.800 (20.32)	.25 (6.35)	.100 (2.54)	.097 (2.46)	- -	.060 (1.52)	.040 (1.02)	.105 (2.67)	.910 (23.11)	- -	.060 (1.52)	.060 (1.52)	- -	2.85

Dimensions are in inches (mm). Tolerances: 2PL. +/- .03; 3PL. +/- .015

Notes:

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

For RoHS Case Styles: 2-5 μ inch (.05-.13 microns) Gold over 120-240 μ inch (3.05-6.10 microns) Nickel plate.
For RoHS-5 Case Styles: Tin-Lead plate.

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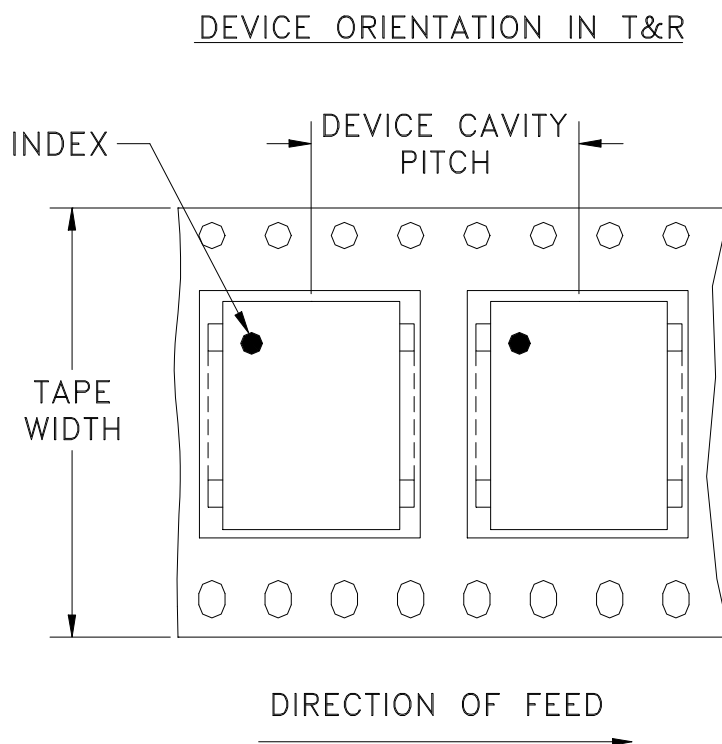
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