Engineering Development Model

Band Pass Filter BPF-EDU2728/1+

Surface Mount

Important Note

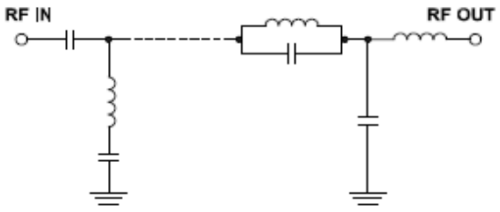
This model has been designed, built and tested in our engineering department. Performance data represents model capability.
At present it is a non-catalog model. On request, we can supply a final specification sheet, part number and price/delivery information.

Please click "Back", and then click "Contact Us" for Applications support.

HU1186

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C				
Parameter	**Min.**	**Typ.**	**Max.**	**Units**
Passband (Loss < 2.5 dB)	470	-	616	MHz
Centre frequency	-	543	-	MHz
Low Band (Loss > 40 dB)	0.3	280	-	MHz
Low Band (Loss > 20 dB)	280	390	-	MHz
High Band (Loss > 20 dB)	-	710	3000	MHz
Passband VSWR	-	1.5	1.9	(:1)
Stopband VSWR	-	20	-	(:1)

Functional Schematic



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

PIN CONNECTIONS	
Input	2
Output	9
NC	6,13
Ground	1,3,4,5,7,8,10,11,12,14

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

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Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
0.3	89.27	0.05	470	12.28
1.0	103.90	0.05	471	11.81
10.0	103.29	0.05	472	11.38
100.0	73.25	0.04	473	11.00
200.0	63.93	0.06	475	10.34
280.0	57.46	0.14	480	9.14
300.0	52.55	0.16	485	8.32
390.0	33.08	0.37	490	7.69
395.0	30.65	0.39	495	7.19
400.0	28.44	0.42	500	6.80
410.0	24.56	0.49	505	6.50
422.0	20.84	0.60	510	6.26
450.0	16.11	1.85	515	6.08
454.0	8.15	3.62	520	5.94
460.0	3.04	9.82	526	5.81
462.0	2.43	12.03	530	5.74
470.0	1.53	16.83	534	5.68
543.0	0.83	24.09	538	5.63
616.0	1.47	17.02	543	5.58
620.0	1.65	14.96	546	5.55
636.0	3.19	13.21	550	5.52
645.0	10.39	3.81	554	5.50
650.0	19.32	2.12	558	5.50
655.0	26.89	1.53	562	5.52
675.0	22.97	0.94	566	5.54
700.0	28.52	0.70	570	5.59
705.0	29.97	0.67	574	5.66
710.0	31.52	0.65	578	5.75
750.0	54.64	0.51	582	5.87
800.0	42.97	0.47	586	6.02
1000.0	47.55	0.57	590	6.20
1250.0	59.84	0.43	594	6.43
1500.0	36.77	0.61	598	6.69
1750.0	51.60	0.49	602	6.98
2000.0	68.22	0.53	606	7.32
2250.0	56.85	0.58	610	7.70
2500.0	48.35	0.63	612	7.91
2750.0	43.10	0.71	613	8.01
2900.0	40.85	0.75	615	8.26
3000.0	40.38	0.77	616	8.38

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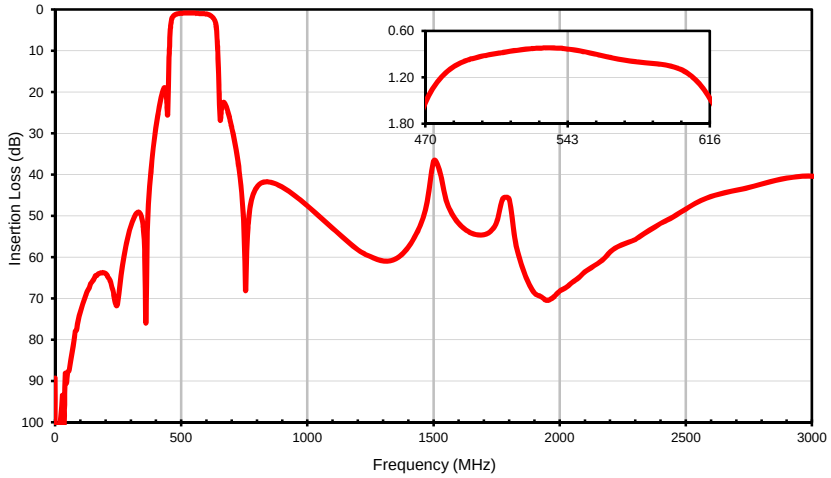
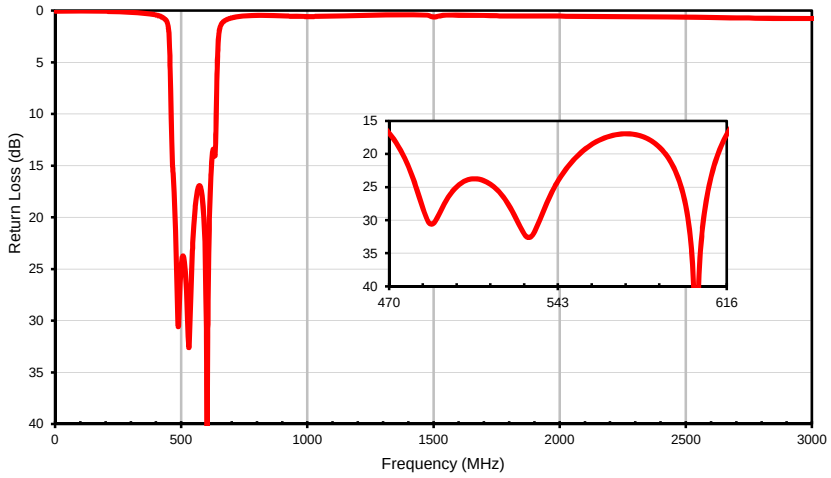
Typical Performance Curves

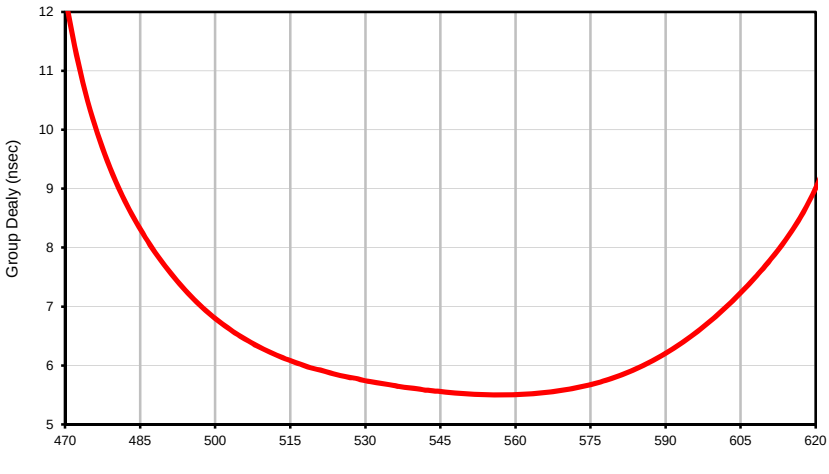
Insertion Loss



Return Loss



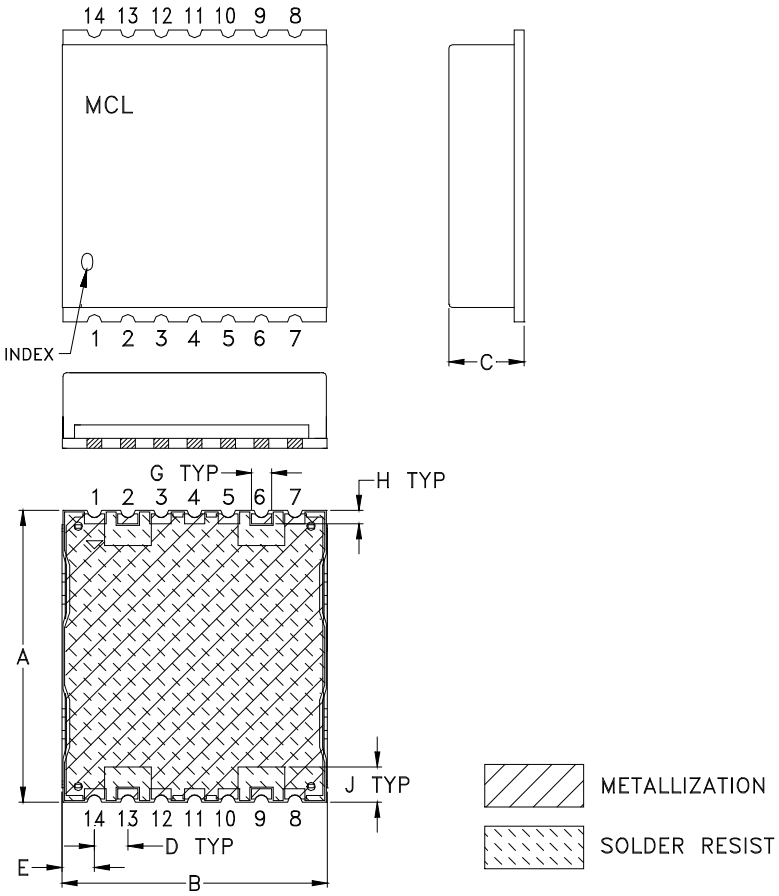
Group Delay



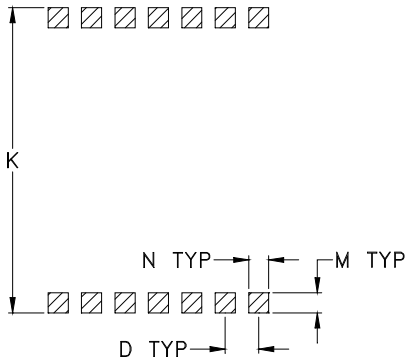
Case Style HU

Outline Dimensions

HU1186



PCB Land Pattern



Suggested Layout,
Tolerance to be within ±.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

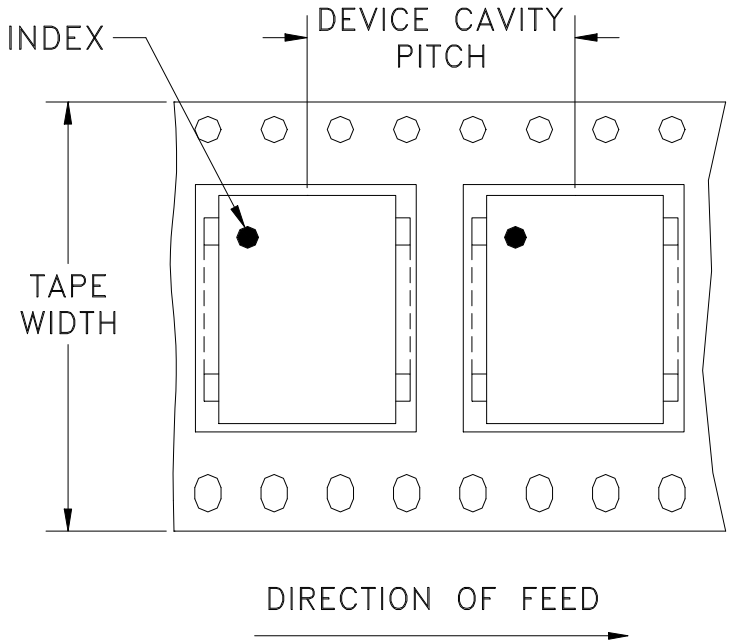
Dimensions are in inches (mm). Tolerances: 2PL. +/- .03; 3PL. +/- .015

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.

Tape & Reel Packaging TR-F21

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel
32	32	13	200

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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