Engineering Development Model

Band Pass Filter BPF-EDU1382+

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.

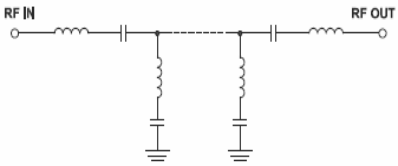
Please click "Back", and then click "Contact Us" for Applications support.

CASE STYLE : HP1156

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C

Parameter	Min.	Typ.	Max.	Units
Passband (Loss < 3.0 dB)	145		150	MHz
Centre frequency		148		MHz
Low Band (Loss > 40 dB)	DC		110	MHz
Low Band (Loss > 20 dB)	110		118	MHz
High Band (Loss > 20 dB)	166		175	MHz
High Band (Loss > 40 dB)	175		400	MHz
Passband VSWR		1.2	1.67	(: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	0.5W

PIN CONNECTIONS

Input	2
Output	11
Not Connected	9,18
Case Ground	1, 3- 8, 10,12-17

Metal Shield Band Pass Filter BPF-EDU1382+

Typical Performance Data

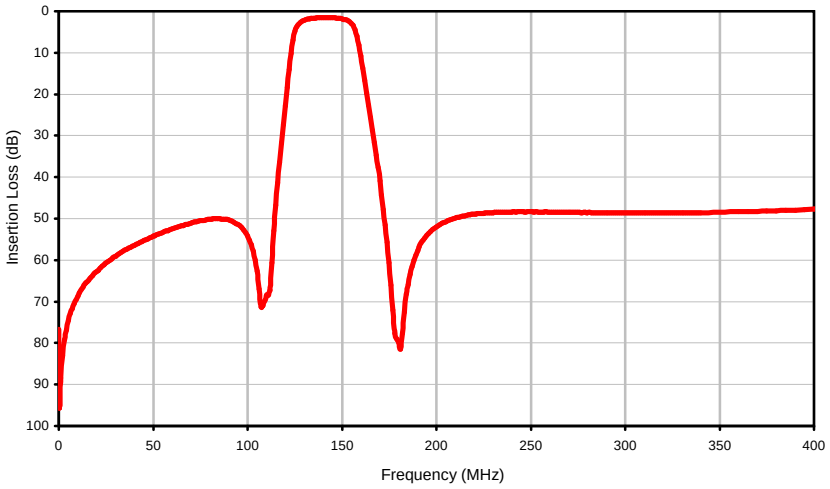
FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)
0.03	76.67	0.001
10	68.73	0.001
50	54.20	0.01
110	68.37	0.24
115	46.74	0.46
118	31.75	0.79
121	18.43	1.77
123	10.11	4.23
124	6.90	7.36
125	4.82	13.19
127	3.04	31.45
130	2.14	22.80
140	1.51	22.23
145	1.58	20.90
148	1.71	19.53
150	1.84	21.09
156	3.46	12.31
158	6.04	5.28
163	19.68	1.12
166	28.64	0.71
170	40.89	0.47
175	60.72	0.33
200	52.00	0.12
400	47.67	0.05

FREQUENCY (MHz)	GROUP DELAY (nsec)
125	64.77
127	61.82
130	46.03
133	36.95
135	33.67
137	31.83
140	30.82
141	30.72
142	30.72
143	30.79
144	30.95
145	31.26
146	31.76
147	32.47
148	33.44
149	34.66
150	36.30
151	38.36
152	41.04
153	44.33
155	51.34
161	37.59
162	31.38
163	25.87

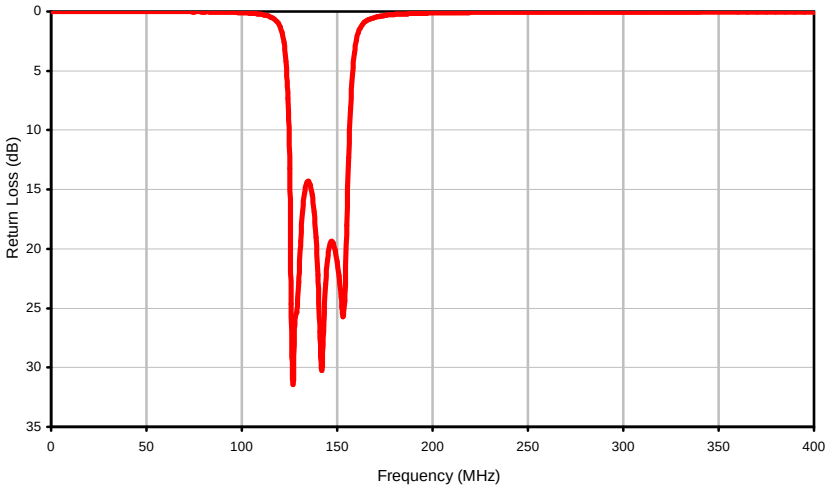
Metal Shield Band Pass Filter BPF-EDU1382+

Typical Performance Curves

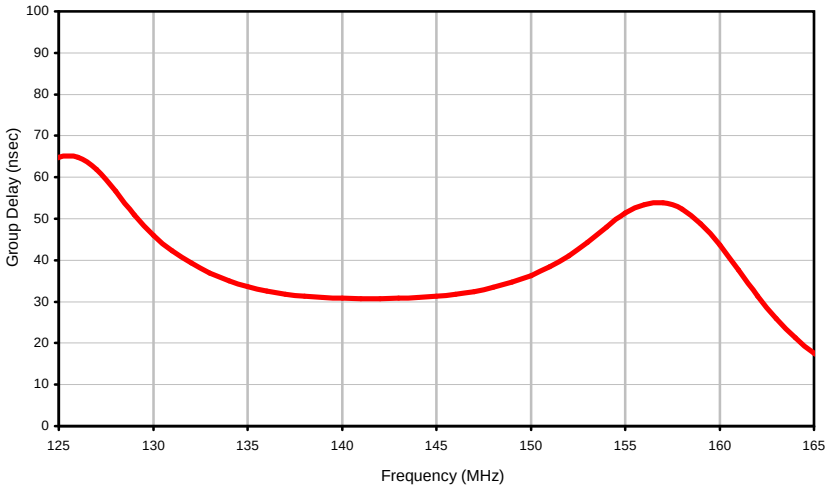
Insertion Loss



Return Loss

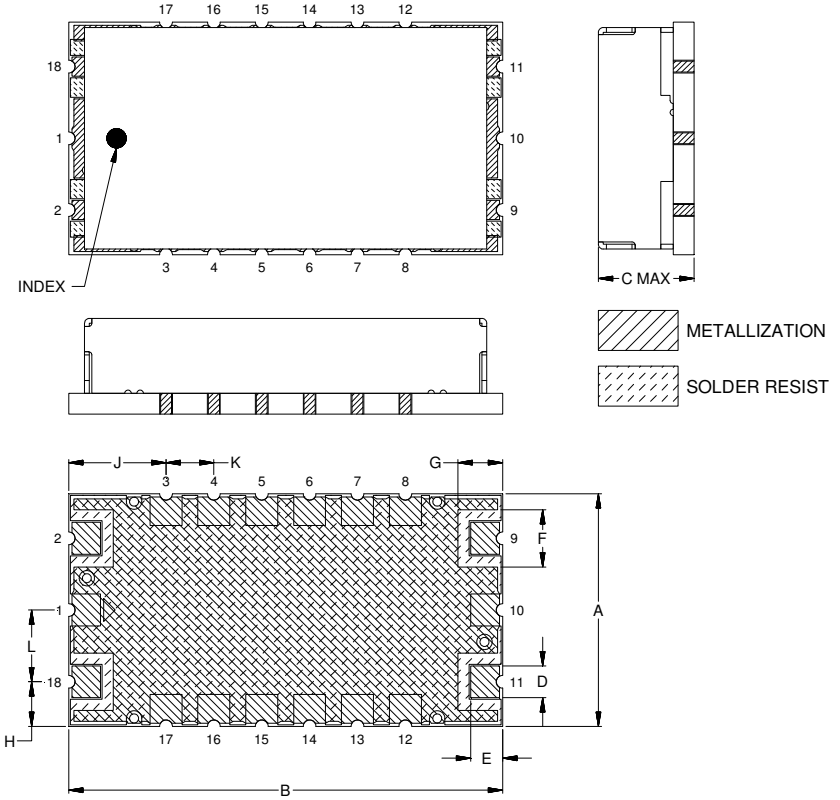


Group Delay

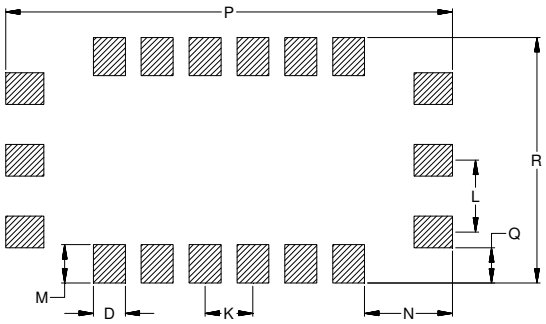


Case Style HP

Outline Dimensions HP1156



PCB Land Pattern



Suggested Layout,
Tolweance to be within ±.002

CASE#	A	B	C	D	E	F	G	H	J	K	L	M
HP1156	.730 (18.54)	1.360 (34.54)	.350 (8.89)	.100 (2.54)	.100 (2.54)	.180 (4.57)	.140 (3.56)	.140 (3.56)	.305 (7.75)	.150 (3.81)	.225 (5.72)	.120 (3.05)

CASE#	N	P	Q	R	WT.GRAM
HP1156	.275 (6.99)	1.400 (35.56)	.110 (2.79)	.770 (19.56)	6.0

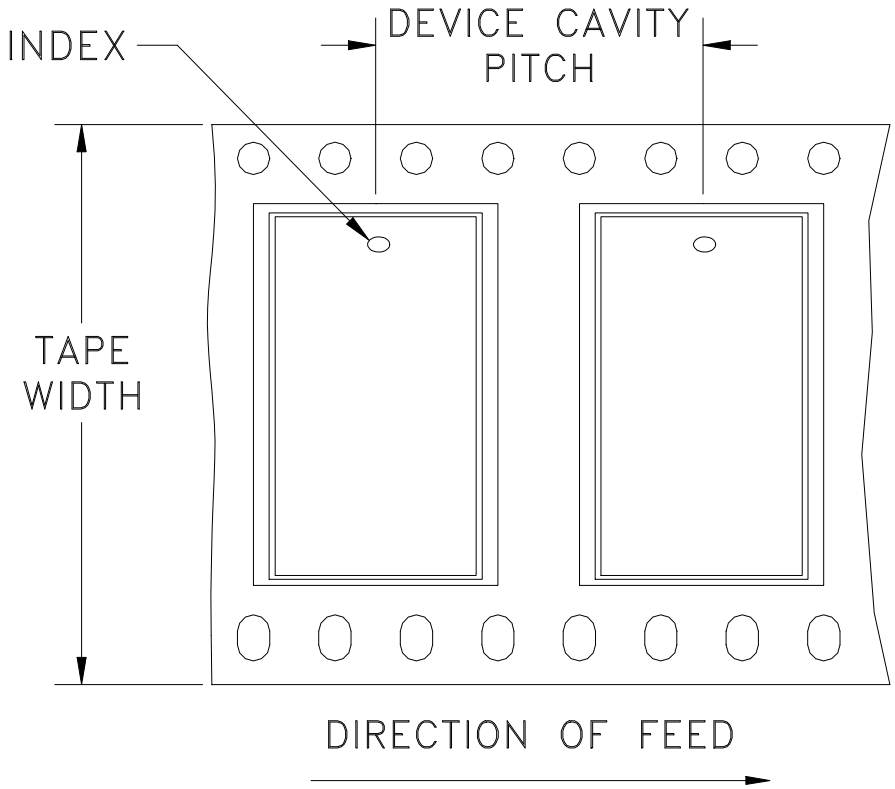
Dimensions are in inches (mm). Tolerances: 2Pl. ± .03; 3Pl. ± .015

Notes:

1. Case material: Nickel-Silver alloy.
2. Base: Printed wiring laminate.
3. Termination finish:
   For RoHS Case Styles: 3-5µinch (.08-.13microns) Gold over 120-240µinch (3.05-6.10microns) Nickel plate.
   For RoHS-5 Case Styles: Tin-Lead plate.

Tape & Reel Packaging TR-F89

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel
56	32	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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