Engineering Development Model

Band Pass Filter BPF-EDU2055

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.

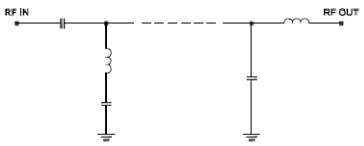
Please click "Back", and then click "Contact Us" for Applications support.

HQ1157

ELECTRICAL SPECIFICATIONS 50Ω @ +25°C

Parameter	Min.	Typ.	Max.	Units
Passband (Loss < 3 dB)	350		1670	MHz
Centre frequency		1010		MHz
Low Band (Loss > 20 dB)	DC	200		MHz
High Band (Loss > 20 dB)		2170	4000	MHz
Passband VSWR		2		(: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	2 W

PIN CONNECTIONS

Input	1
Output	8
Ground	2-7,9-14

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Typical Performance Data

FREQUENCY (MHz)	INSERTION LOSS (dB)	RETURN LOSS (dB)	FREQUENCY (MHz)	GROUP DELAY (nsec)
1.0	88.28	0.05	350	4.29
10.0	67.47	0.04	400	2.83
200.0	75.46	0.17	450	2.19
240.0	31.42	0.34	500	1.86
255.0	20.21	0.52	550	1.66
350.0	0.66	17.68	600	1.52
455.0	0.62	14.70	650	1.41
485.0	0.60	15.18	700	1.32
550.0	0.56	17.31	750	1.26
560.0	0.56	17.55	800	1.22
650.0	0.62	15.67	850	1.21
1010.0	0.64	23.44	900	1.21
1670.0	1.88	15.41	950	1.22
1690.0	2.55	9.83	1000	1.23
1700.0	3.14	7.64	1010	1.23
1820.0	19.59	0.95	1100	1.24
1890.0	29.99	0.71	1200	1.28
2170.0	49.35	0.47	1200	1.28
2250.0	53.86	0.40	1300	1.38
2700.0	47.78	0.36	1350	1.43
3190.0	53.70	1.80	1400	1.49
3490.0	52.24	2.36	1500	1.70
3760.0	55.45	1.22	1600	2.17
4000.0	67.83	0.65	1670	3.10

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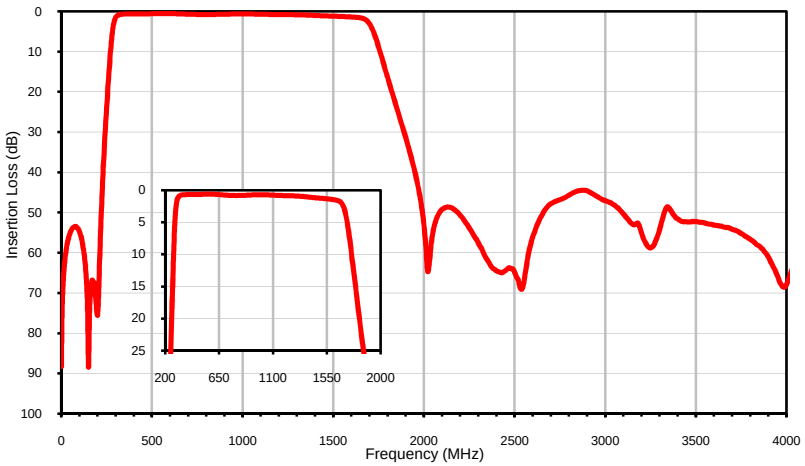
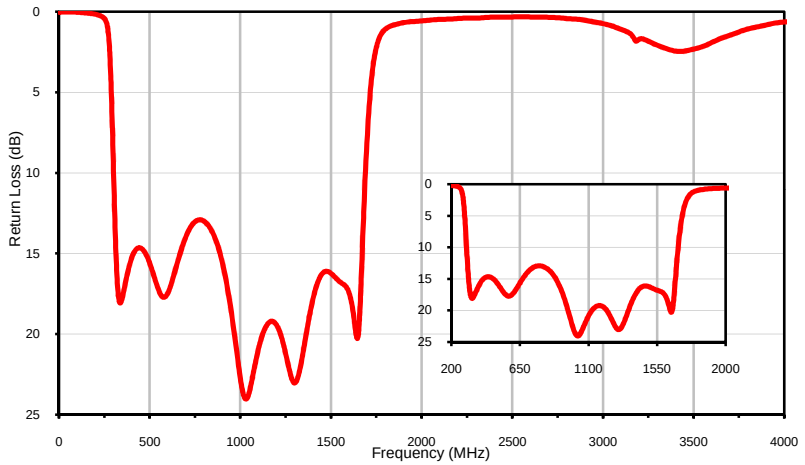
Typical Performance Curves

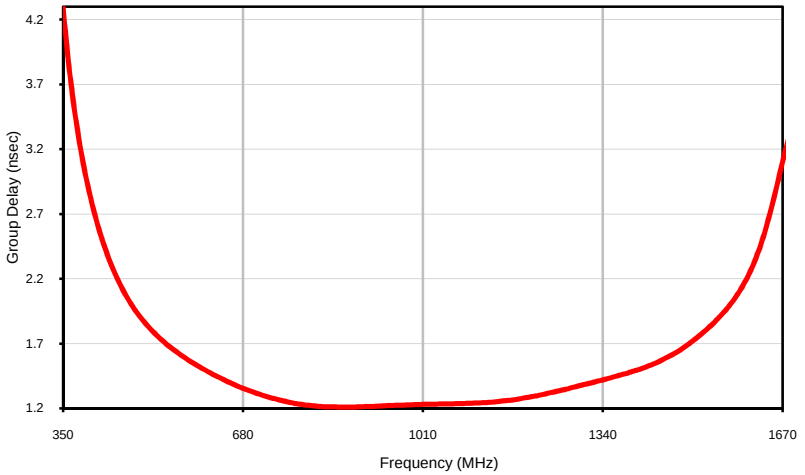
Insertion Loss



Return Loss



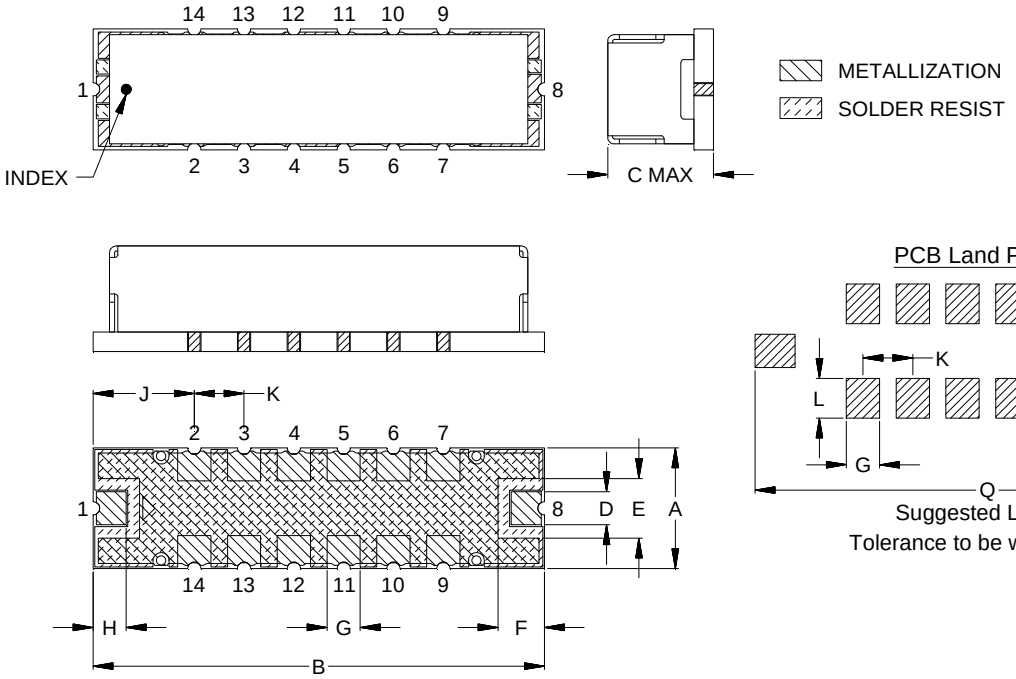
Group Delay



Case Style HQ

Outline Dimensions

HQ1157



CASE#	A	B	C	D	E	F	G	H	J	K	L	M
HQ1157	.365 (9.27)	1.360 (34.54)	.350 (8.89)	.100 (2.54)	.180 (4.57)	.140 (3.56)	.100 (2.54)	.100 (2.54)	.305 (7.75)	.150 (3.81)	.120 (3.05)	.275 (6.99)

CASE#	N	P	Q	WT.GRAM
HQ1157	.152 (3.87)	.405 (10.29)	1.400 (35.56)	4.0

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: 3-5 µ inch (.08-.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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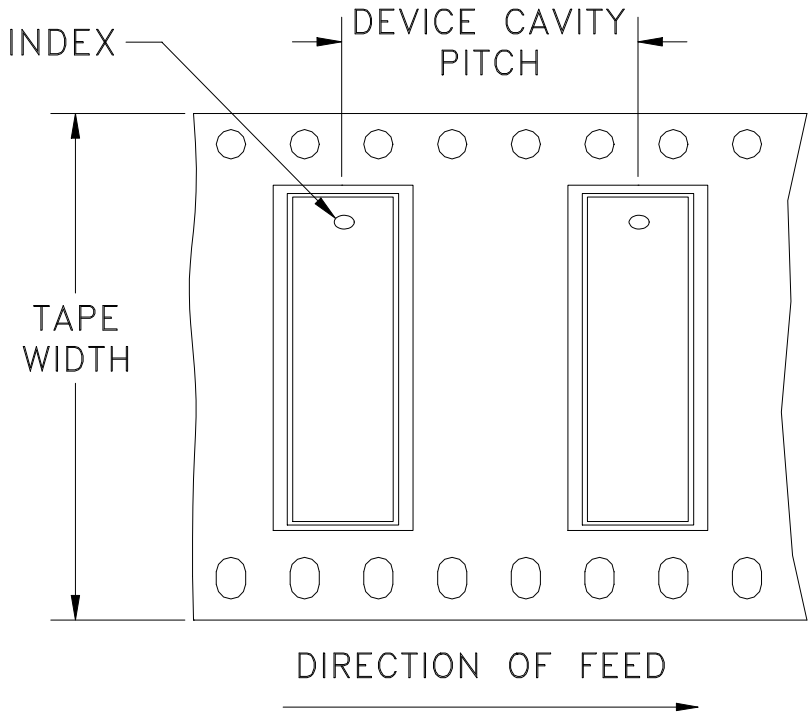
Tape & Reel Packaging TR-F83

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel
56	16	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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