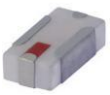
HenryTech

High Pass Filter

HT-HFCN-9700+

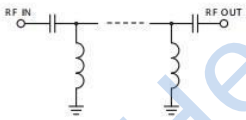
Features
- low cost
- small size
- temperature stable
- excellent power handling, 7W
- hermetically sealed

Applications
- sub-harmonic rejection
- transmitters/receivers
- lab use

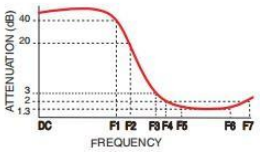


50Ω 9700 to 16980 MHz

Functional Schematic



Specification Definition



Electrical Specifications at 25°C

Parameter		F#	Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Rejection Loss	DC-F1	DC-6770	25	32	-	dB
	Freq.Cut-Off	F1-F2	DC-7550	18	27	-	dB
	VSWR	F3	9070	-	3.0	-	dB
		DC-F2	DC-7550	-	20	-	:1
Stop Band	Insertion Loss	F4-F7	9700-16980	-	1.0	3.0	dB
		F5-F6	11460-16570	-	0.8	2.0	dB
	VSWR	F4-F7	9700-16980	-	1.8	-	:1

Pad Connections

Input	1
Output	3
Ground	2,4

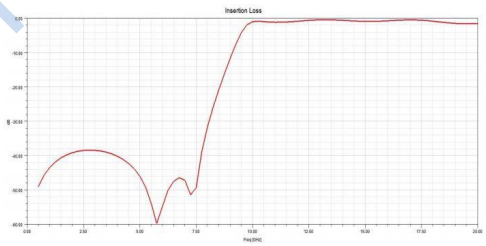
Maximum Ratings

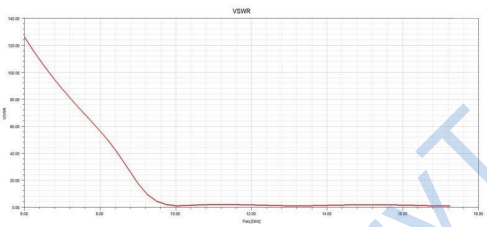
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	7W at 25°C

*Passband rating, derate linearly to 3W at 100°C ambient
Permanent damage may occur if any of these limits are exceeded.

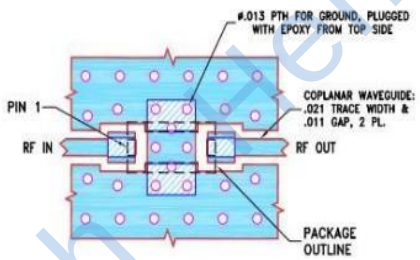
Typical Performance Data at 25° C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	61.91	1737.18
1000	38.60	1500.37
1960	35.58	157.93
3250	40.06	69.49
4170	39.69	32.79
5020	26.83	27.16
6680	22.27	25.72
7570	20.04	21.40
9750	3.03	1.47
10500	1.92	1.46
11580	1.17	1.34
12610	1.73	1.40
13530	1.95	1.52
14550	1.65	2.03
17000	2.01	2.11





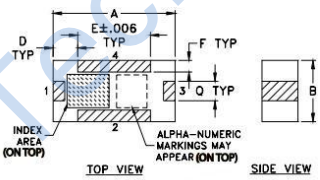
Demo Board MCL P/N: T-39
Suggested PCB Layout (PL-137)

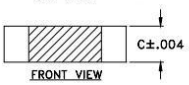


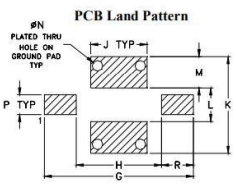
NOTES:
1. TRACE WIDTH & GAP PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010±.001. COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

Outline Drawing







Suggested Layout
Tolerance to be within ±0.02

Outline Dimensions：Unit (mm)

A	3.20	B	1.60	C	0.94
D	0.66	E	1.91	F	0.30
G	4.62	H	2.64	J	1.75
K	3.02	L	1.04	M	0.99
N	0.33	P	0.61	Q	0.51
R	0.99	wt	0.020g		

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