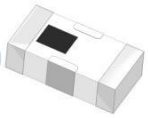
HenryTech

Low Pass Filter

HT-LFCN-320+



50Ω DC to 320 MHz

Features

- excellent power handling
- small size
- 7 sections
- temperature stable
- LTCC construction , and has good moisture resistance, corrosion resistance, high reliability.

Applications

- harmonic rejection
- VHF/UHF transmitters/receivers
- Base Station of Mobile Communication、 lab use.

Electrical Specifications at 25°C

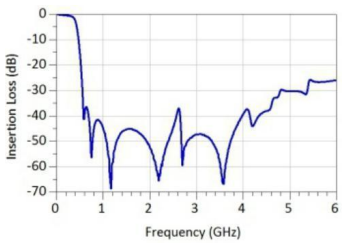
Parameter		F#	Frequency(MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-320	-	-	1.0	dB
	Freq.Cut-Off	F2	460	-	3.0	-	dB
	VSWR	DC-F1	DC-320	-	1.2	-	:1
Stop Band	Rejection Loss	F3	560	20	-	-	dB
		F4-F5	640-2500	-	40	-	dB
	VSWR	F6	5300	-	20	-	dB
		F3-F6	560-5300	-	20	-	:1

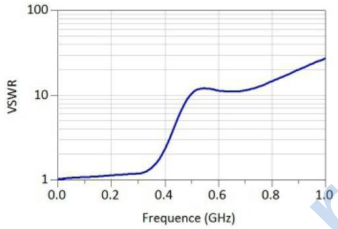
Measured on Characterization Test Board T-39.

Typical Performance Data

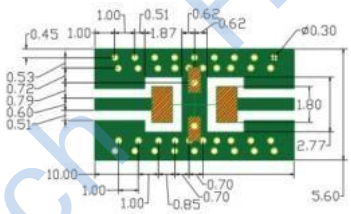
(TEST CONDITIONS: INPUT POWER = 0dBm @Temperature = +25°C)

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	0.01	1.03
100	0.27	1.08
320	0.88	1.23
360	1.33	1.48
460	8.40	6.61
535	23.76	12.05
560	32.26	12.00
580	40.89	11.78
640	36.39	11.07
1100	53.52	34.79
1500	45.41	56.70
2500	44.58	68.77
3500	58.54	81.49
5300	31.15	56.66
6000	26.05	45.83





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



NOTES:
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". 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)

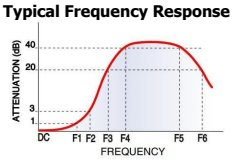
DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Maximum Ratings

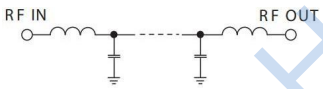
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	8.5W max. at 25°C

* Passband rating, derate linearly to 3.5W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Typical Frequency Response

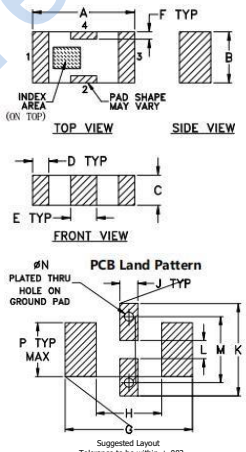


Electrical Schematic



Pin Connections	
RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing



Outline Dimensions：Unit (mm)					
A	3.20	B	1.60	C	0.95
D	0.51	E	0.81	F	0.23
G	4.29	H	2.21	J	0.61
K	3.10	L	0.61	M	2.21
N	0.30	P	1.80	wt	0.02g

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