

Low Pass Filter

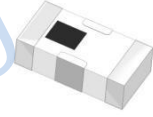
Features

- excellent power handling
- small size
- 5 sections
- temperature stable
- LTCC construction

Applications

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

HT-LFCN-1325+



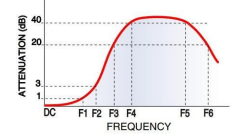
50Ω DC to 1325 MHz

Maximum Ratings

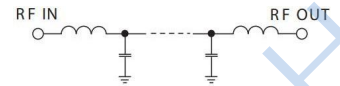
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	9W max. at 25°C

* Passband rating, derate linearly to 4 W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Typical Frequency Response



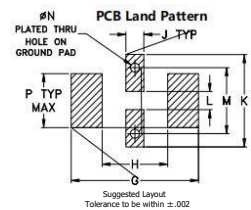
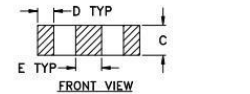
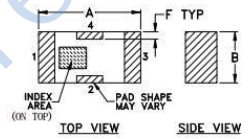
Electrical Schematic



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	w	0.02g

Electrical Specifications at 25°C

Parameter	F#	Frequency(MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC-1325	-	0.8	1.0	dB
	Freq.Cut-Off	F2	1560	-	3.0	-	dB
	VSWR	DC-F1	DC-1325	-	1.2	1.5	:1
Stop Band	Rejection Loss	F3	2100	25	32	-	dB
		F4-F5	2200	30	35	-	dB
		F6	4250	25	28	-	dB
		F3-F6	2100-4250	-	20	-	:1

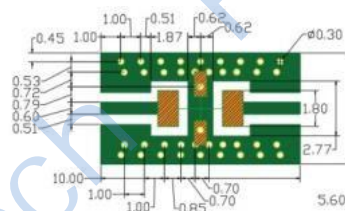
Measured on Characterization Test Board T-39.

Typical Performance Data

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

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.06	1.02
500	0.24	1.20
750	0.35	1.23
1200	0.62	1.06
1320	0.83	1.12
1500	2.00	1.39
2000	36.73	36.07
2270	38.40	46.71
2570	39.40	55.64
3024	37.64	60.94
4042	29.20	71.07
5000	32.09	68.75
6000	36.27	53.14
7000	25.21	46.76
8000	26.39	48.58

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



- NOTES:
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS R04350 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

