

Ceramic Low Pass Filter

LFCN-1325D+

50Ω DC to 1325 MHz

NON-CATALOG



Maximum Ratings

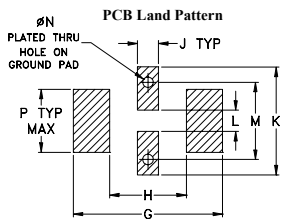
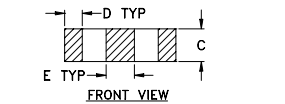
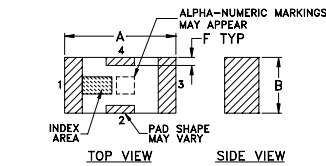
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	9W max. at 25°C
Max. DC Voltage at pins 1&3	25 VDC
DC Current Input to Output	0.5A max. at 25°C

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

Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

Outline Drawing



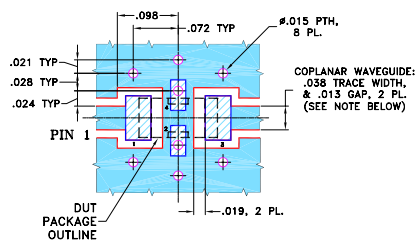
Suggested Layout,
Tolerance to be within ±0.02

Outline Dimensions (inch)

A	B	C	D	E	F	G
.126	.063	.037	.020	.032	.009	.169
3.20	1.60	0.94	0.51	0.81	0.23	4.29

H	J	K	L	M	N	P	wt
.087	.024	.122	.024	.087	.012	.071	grams
2.21	0.61	3.10	0.61	2.21	0.30	1.80	.020

Demo Board MCL P/N: TB-270 Suggested PCB Layout (PL-137)



NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS .020" ± .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.

Features

- excellent power handling, 9W
- small size
- 5 sections
- temperature stable
- LTCC construction

Applications

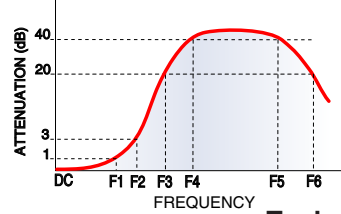
- harmonic rejection
- VHF/UHF transmitters/receivers
- lab use

Electrical Specifications¹ at 25°C

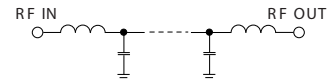
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC-1325	—	—	1.3	dB
	Freq. Cut-Off	F2	1560	—	3.0	—	dB
	VSWR	DC-F1	DC-1325	—	1.4	—	:1
Stop Band	Rejection Loss	F3	2100	20	—	—	dB
		F4-F5	2200	—	30	—	dB
		F6	4250	—	20	—	dB
		VSWR	F3-F6	2100-4250	—	20	—

1. DC Resistance to ground is 100 Mohms min.

Typical Frequency Response

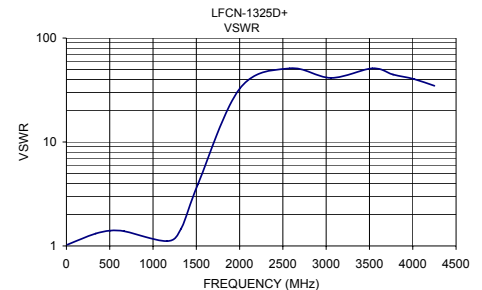
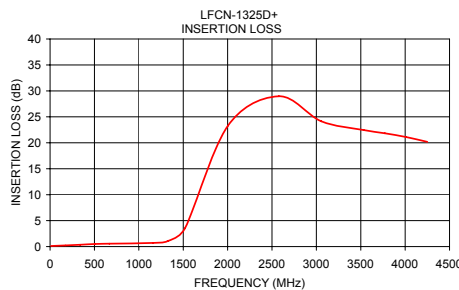


Electrical Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10.00	0.12	1.03
174.38	0.23	1.17
338.75	0.36	1.32
503.13	0.50	1.40
667.50	0.56	1.38
1160.63	0.71	1.11
1325.00	1.06	1.47
1518.75	3.52	3.91
2003.13	23.27	32.79
2577.77	28.97	51.10
3055.55	24.14	41.37
3533.33	22.45	51.10
3772.22	21.83	44.55
4011.11	21.11	40.41
4250.00	20.18	34.75



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