

LTCC 低通滤波器 (Low Pass Filter)

HT-LFCG-4400+

Features

- Low insertion loss.
- Good rejection.
- LTCC Construction.
- temperature stable.
- Small size.

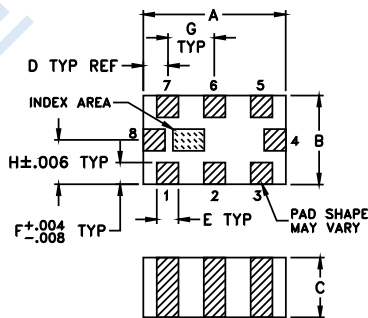
Applications

- Test and measurement
- Telecommunications & broadband wireless applications
- Public safety communication
- Satcom modems

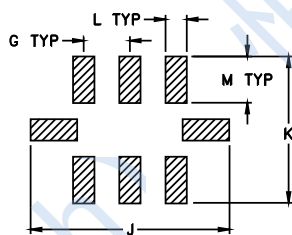
Pad Connections

RF IN	8
RF OUT	4
GROUND	1,2,3,5,6,7

Outline Drawing



PCB Land Pattern

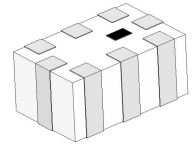
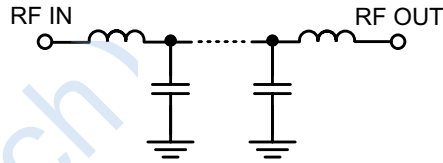


Suggested Layout,
Tolerance to be within .002

Outline Dimensions : inch mm

A	B	C	D	E	F	G
.079	.049	.037	.014	.012	.012	.026
2.01	1.24	0.94	0.36	0.30	0.30	0.66
H	J	K	L	M		wt
.025	.134	.104	0.014	.039		grams
0.64	3.40	2.64	0.36	0.99		.008

Functional Schematic



50 Ω
DC to 4400MHz

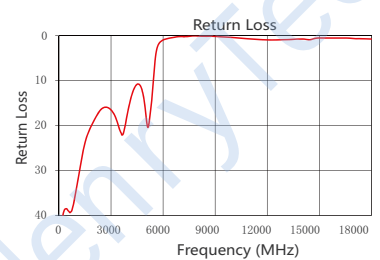
Electrical Specifications(1) at 25°C

Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC - 4400	—	1.6	2.1	dB
	Freq. Cut-Off	5200	—	3.0	—	dB
	Return Loss	DC - 4400	—	11	—	dB
Stop Band	Rejection Loss	6200 - 6700	20	40	—	dB
		6700 - 8800	35	45	—	dB
		8800 - 12200	25	33	—	dB
		12200 - 18800	—	20	—	dB

1.In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

Typical Performance Data at 25°C

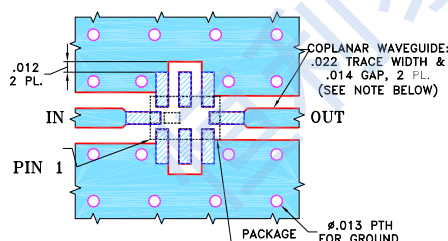
Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)
10	0.07	47.29
100	0.11	42.69
1000	0.23	34.16
2000	0.41	19.04
3000	0.60	16.50
4000	0.90	16.31
4400	1.31	11.25
5200	2.29	19.20
5350	3.26	14.25
5580	10.04	4.24
5750	20.40	1.83
5900	30.37	1.19
6200	54.37	0.68
6700	55.70	0.31
7200	50.37	0.20
8000	50.02	0.06
8800	49.50	0.11
12200	32.49	0.94
14000	35.23	0.73
18000	36.11	0.75



Notes

- The specifications are tested at 25°C±5°C, relative humidity 55~75%.
- Other quality and characteristic not specify in this datasheet.

Suggested PCB Layout



NOTES:

- COPLANAR WAVEGUIDE IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" ± .001". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
- 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 +125°C
Storage Temperature	-55°C to +125°C
RF Power Input*	4.5W at 25°C

* Permanent damage may occur if any of these limits are exceeded.

Tel: +86-28-85589664

E-mail: mr_li@henglitaitech.com

Web: www.hltchips.com

Room 1401, 14th Floor, Building 5, Huaxi Science and Technology Innovation Center, No. 50, Shuixi Road, Jinniu District, Chengdu City