

LTCC 低通滤波器 (Low Pass Filter)

HT-LFCG-4800+

Features

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

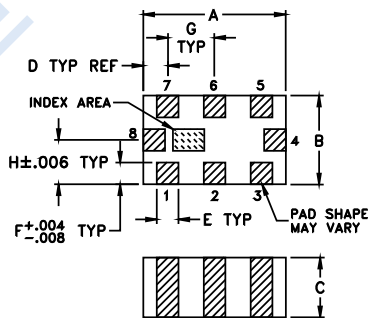
Applications

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

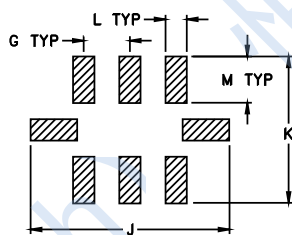
Pad Connections

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

Outline Drawing



PCB Land Pattern

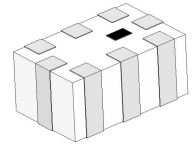
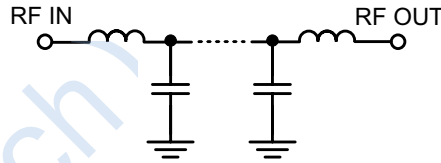


Suggested Layout,
Tolerance to be within .002

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 4800MHz

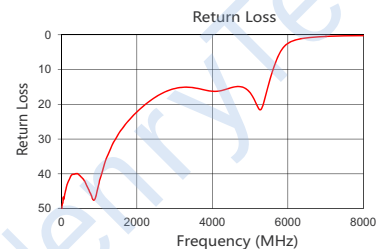
Electrical Specifications(1) at 25°C

Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC - 4800	—	1.2	1.7	dB
	Freq. Cut-Off	5600	—	3.0	—	dB
	Return Loss	DC - 4800	—	12	—	dB
Stop Band	Rejection Loss	6700 - 7200	20	34	—	dB
		7200 - 9300	33	42	—	dB
		9300 - 12500	22	29	—	dB
		12500 - 18000	—	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

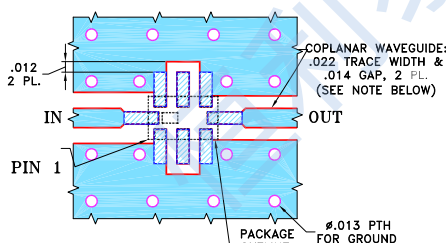
Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)
10	0.08	51.01
100	0.09	45.43
300	0.13	40.15
400	0.15	39.94
500	0.17	40.59
1000	0.22	42.59
4800	1.07	15.04
5440	1.93	16.27
5600	3.16	10.26
6200	23.23	1.50
6400	31.96	1.04
6700	44.87	0.67
7200	55.48	0.38
9000	50.78	0.26
9300	48.92	0.28
11000	36.80	0.49
12500	30.68	0.42
13000	30.01	0.42
15000	30.52	0.40
18000	23.97	0.36



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.

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