

# LTCC 高通滤波器 (High Pass Filter)

# HT-HFCN-3800+

### Features

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

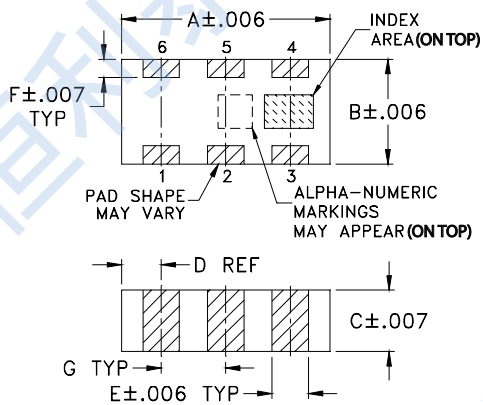
### Applications

- Sub-harmonic rejection.
- Transmitters/receivers.
- Lab use.

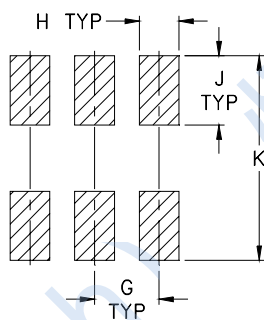
### Pad Connections

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

### Outline Drawing



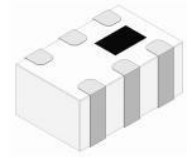
### PCB Land Pattern



### Outline Dimensions : inch mm

A	B	C	D	E	F
.126	.063	.035	.024	.022	.011
3.20	1.60	0.89	0.61	0.56	0.28
G	H	J	K		wt
.039	.024	.042	.123		grams
0.99	0.61	1.07	3.12		.020

### Functional Schematic



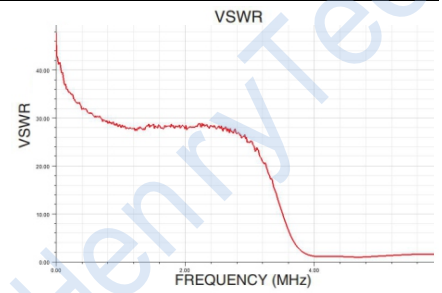
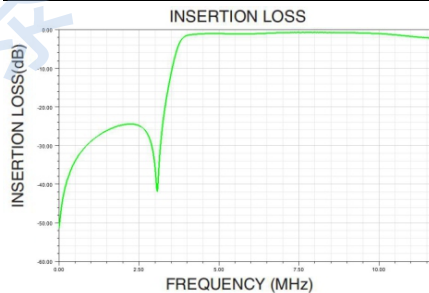
### Electrical Specifications(1) at 25°C

STOPBAND (MHz) Min.	f <sub>co</sub> , MHz Nom.	PASSBAND (MHz)	VSWR (:1) Typ. Frequency (MHz)	POWER INPUT (W)	NO. OF SECTIONS
(loss>30dB) Typ.	(loss 3dB) Typ.	(loss<1.5dB) Max.	Stopband 1.5:1		
2500	3800	4500-9000	3950-10000	7	5

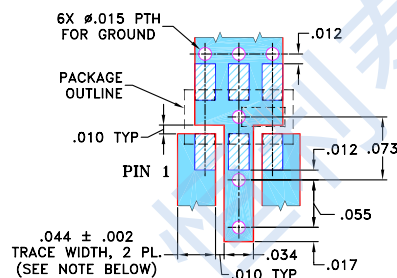
1.In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss(dB)	VSWR (:1)
50	53.91	1737.18
240	40.00	1737.18
1000	31.58	157.93
1650	60.06	69.49
2150	37.69	32.79
2270	32.83	27.16
3000	28.27	25.72
3200	25.04	21.40
3800	3.03	1.47
4500	1.02	1.46
6000	1.13	1.34
8500	0.73	1.40
9000	0.91	1.52
10000	1.06	2.03
11000	1.71	2.31



### Suggested PCB Layout



- NOTE:** 1. TRACE WIDTH IS SHOWN FOR ROGERS R04350 WITH DIELECTRIC THICKNESS: .020 ± .0015; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT
  - DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

### Maximum Ratings

Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +125°C
RF Power Input*	7W 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.