

LTCC 带通滤波器 (Bandpass Filter)

HT-BFCN-5100+

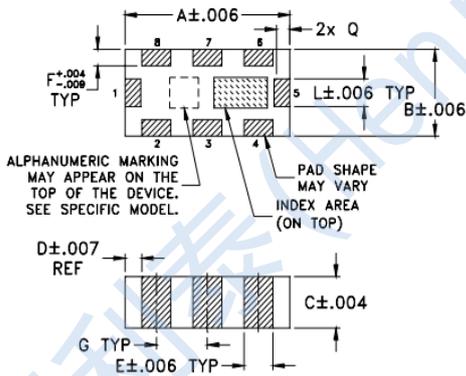
Features

- Small size
- Temperature stable
- Hermetically sealed
- LTCC construction

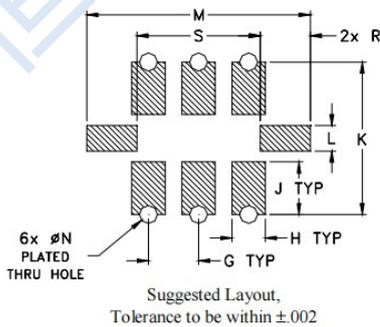
Applications

- Harmonic Rejection
- Transmitters / Receivers
- Test and Measurement

Outline Drawing



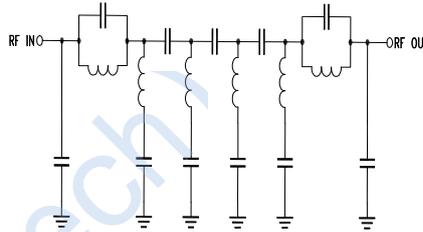
PCB Land Pattern



Outline Dimensions $\frac{1}{32}$ inch mm

A	B	C	D	E	F	G	H	J
.126	.063	.037	.013	.022	.012	.039	.026	.041
3.20	1.60	0.94	0.33	0.56	0.30	0.99	0.66	1.04
K	L	M	N	P	Q	R	S	wt
.119	.020	.174	.014	--	.012	.039	.096	grams
3.02	0.51	4.42	0.36	--	0.30	0.99	2.44	.017

Functional Schematic



50 Ω
3700MHz to 7100MHz

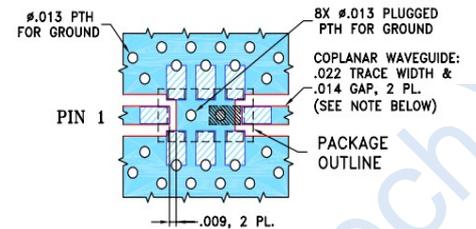
Electrical Specifications(1,2) at 25°C

Parameter	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Center Frequency	3100 - 7100	—	5100	MHz	
	Insertion Loss	3100 - 7100	—	1.5	2.1	dB
	VSWR	3100 - 7100	—	2	—	:1
Stop Band, Lower	Insertion Loss	DC - 2100	—	25	—	dB
	VSWR	DC - 2100	—	20	—	:1
Stop Band, Upper	Insertion Loss	9500 - 17000	—	20	—	dB
	VSWR	9500 - 17000	—	30	—	:1

Pad Connections

Input	1
Output	5
Ground	2,3,4,6,7,8

Suggested PCB Layout



Maximum Ratings

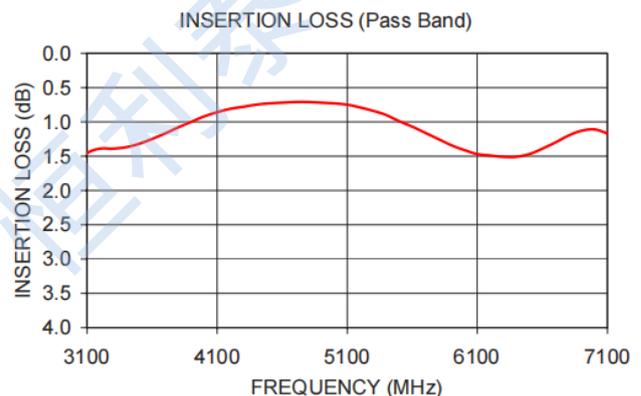
Operating Temperature	-55°C to +100°C
Storage Temperature	-55°C to +100°C
RF Power Input*	2W max at 25°C

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

NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010" \pm .001". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND 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

Typical Performance Data at 25°C



Typical Performance Data at 25°C

