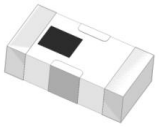
Jieying Communication Technology (Shenzhen) Co., Ltd.
http://www.jytxjs.cn

High Pass Filter

JY-HFCN-440+

Features
- excellent power handling
- Small size
- 7 sections
- temperature stable
- LTCC construction with great moisture resistance, corrosion resistance, and high reliability

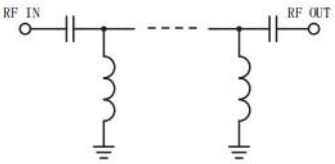
Applications
- sub-harmonic rejection
- transmitters/receivers
- base station of mobile communication and lab use



Generic photo used for illustration purposes only

50 Ω 500 to 2500 MHz

electrical schematic



Electrical Specifications[1] (TAMB= 25° C)

STOP BAND (MHz) Min (Loss>40dB) Min.	STOP BAND (MHz) Min (Loss>20dB) Min.	FCO,(MHz) Nom. (Loss 3dB) Typ.	PASS BAND (MHz) (Loss<1.3dB) Max.	PASS BAND (MHz) (Loss<2dB) Typ.	VSWR (:1) Stopband	VSWR (:1) Frequency (MHz) 1.6:1	POWER INPUT (W)	NO. OF SECTIONS
230	350	440	600-1700	500-2500	20:1	500-1700	7	7

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

Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

Maximum Ratings

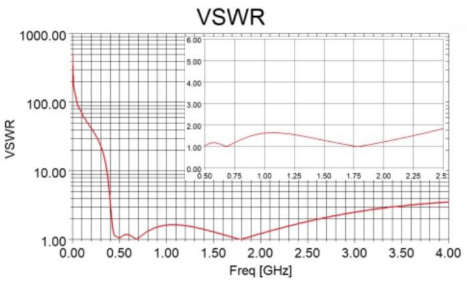
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	7W at 25°C

* Passband rating, derate linearly to 3W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

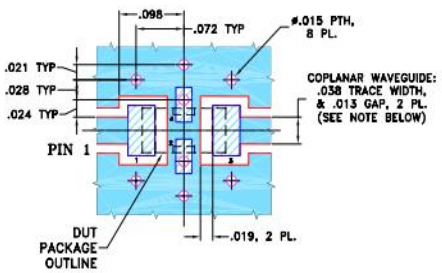
Typical Performance Data at 25° C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
30.53	67.79	97.09
100.00	61.35	70.51
230.00	60.66	36.14
350.00	30.68	13.62
385.00	15.85	6.35
410.00	7.98	2.68
440.00	3.65	1.21
450.00	3.06	1.13
500.00	1.84	1.05
510.00	1.71	1.07
600.00	1.08	1.16
800.00	0.68	1.31
1000.00	0.71	1.62
1500.00	0.40	1.29
1700.00	0.32	1.08
2500.00	0.70	1.83
4000.00	1.98	3.53





Suggested PCB Layout

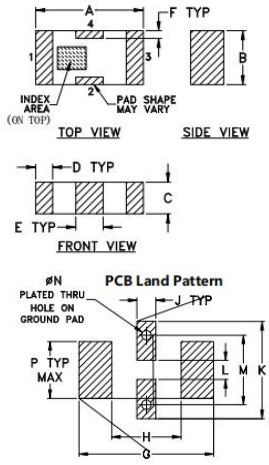


NOTES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Outline Drawing



Suggested Layout
Tolerance to be within ±0.05

Outline Dimensions: Unit (mm)

A	3.20	B	1.60	C	0.95
D	0.51	E	0.81	F	0.23
G	4.29	H	2.21	J	0.61
K	3.10	L	0.61	M	2.21
N	0.30	P	1.8	wt	0.02g

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Tel : +86 0755-27881106
Fax : +86 0755-27597069
Add : 806 Building B7, Tianrui Industrial Park, Fuyong Street, Baoan District, Shenzhen