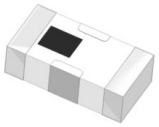
Jieying Communication Technology (Shenzhen) Co., Ltd.
http://www.jytxjs.cn

High Pass Filter

JY-HFCN-650+



Generic photo used for illustration purposes only

50 Ω 710 to 2490 MHz

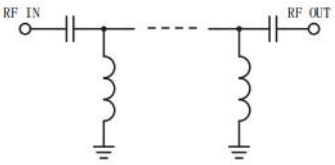
Features

- 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

electrical schematic



Electrical Specifications[1] (T_{AMB}= 25° C)

STOP BAND (MHz) (Loss>33dB) Min.	STOP BAND (MHz) (Loss>20dB) Min.	FCO,(MHz) Nom. (Loss 3dB) Typ.	PASS BAND (MHz) (Loss<1.3dB) Max.	PASS BAND (MHz) (Loss<2.1dB) Max.	VSWR (:1) Stopband Typ.	VSWR (:1) Frequency (MHz) 1.5:1	POWER INPUT (W)	NO. OF SECTIONS
390	480	710	850-2000	759-2490	20:1	760-1700	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

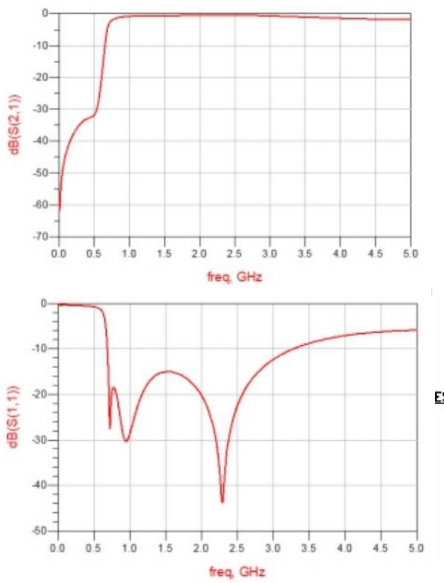
Maximum Ratings

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

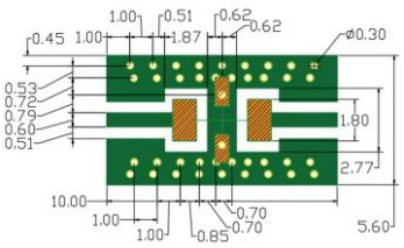
* Passband rating, derate linearly to 3.5W at 100°C ambient.
Permanent damage may occur if any of these limits are exceeded.

Typical Performance Data at 25° C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10	59.22	92.51
390	33.08	30.85
480	32.21	24.57
560	27.70	17.34
550	28.80	18.48
600	21.14	12.18
650	10.66	5.09
710	3.15	1.21
850	1.23	1.15
1500	0.64	1.43
2000	0.46	1.21
2490	0.42	1.16
2800	0.55	1.44
4000	1.41	2.62



Suggested PCB Layout



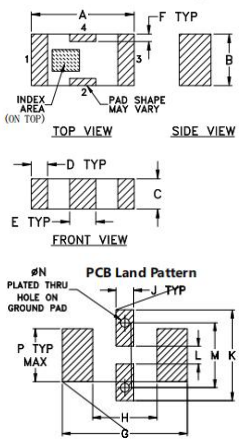
ES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.

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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