

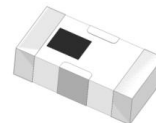
Features

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

Applications

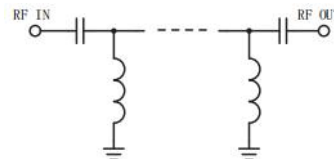
- sub-harmonic rejection
- transmitters/receivers
- base station of mobile communication and lab use

JY-HFCN-2100+



50 Ω 2200 to 6000 MHz

electrical schematic



Pin Connections

RF IN	1
RF OUT	3
GROUND	2,4

Maximum Ratings

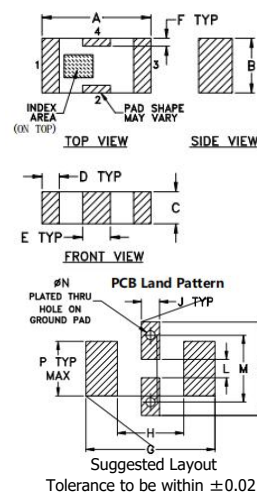
Operating Temperature -55°C to 100°C

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.

Outline Drawing



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

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

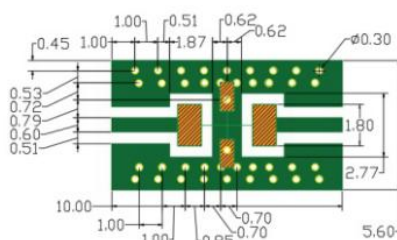
STOP BAND (MHz)		FCO ₁ (MHz) Nom.	PASS BAND (MHz)		VSWR (:1)		POWER INPUT (W)	NO. OF SECTIONS
(Loss>27dB) Min.	(Loss>20dB) Min.	(Loss 3dB) Typ.	(Loss<1.3dB) Max.	(Loss<2dB) Typ.	Stopband Typ.	Frequency (MHz) 1.5:1		
1050	1530	2100	2500-5000	2200-6000	20:1	2400-5200	7	7

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)	Return Loss (dB)	Insertion Loss (dB)	VSWR (:1)
1	0.01	75.67	1249.77
100	0.10	49.62	179.83
1050	0.32	29.20	54.45
1530	0.52	28.37	33.51
1700	1.33	16.17	13.08
1900	4.87	4.26	3.66
2000	4.66	3.74	3.82
2100	6.20	2.73	2.92
2200	8.79	1.89	2.14
2400	15.74	1.10	1.39
2500	19.40	0.94	1.24
5000	11.95	1.24	1.68
5200	10.69	1.56	1.83
6000	11.93	2.45	1.68
7000	21.92	1.17	1.17
9000	7.44	2.20	2.48

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

