



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

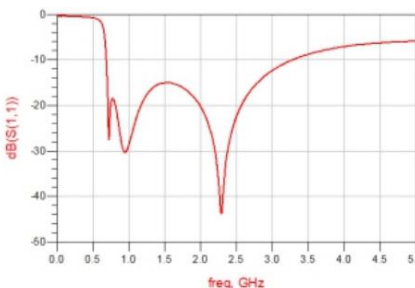
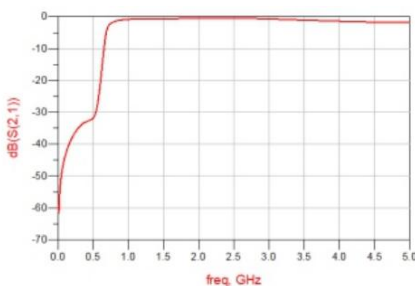
Electrical Specifications¹ (T_{AMB}= 25° C)

STOP BAND (MHz)		FCO ₁ (MHz) Nom.	PASS BAND (MHz)		VSWR (:1)		POWER INPUT (W)	NO. OF SECTIONS
(Loss>33dB) Min.	(Loss>20dB) Min.	(Loss 3dB) Typ.	(Loss<1.3dB) Max.	(Loss<2.1dB) Max.	Stopband Typ.	Frequency (MHz) 1.5:1		
390	480	710	850-2000	759-2490	20:1	760-1700	7	7

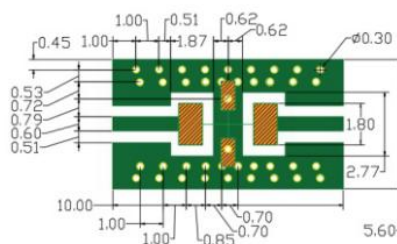
1. In Application where DC voltage is present at either input or output ports, coupling capacitors are required.

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

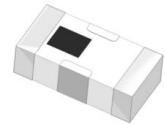


Suggested PCB Layout



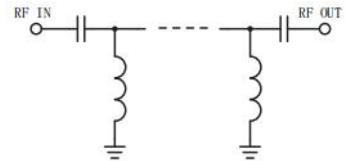
- ES: 1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS RO4350 WITH THICKNESS .508" ± .0015".
COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH & GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
- DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

JY-HFCN-650+



50 Ω 710 to 2490 MHz

electrical schematic



Pin Connections

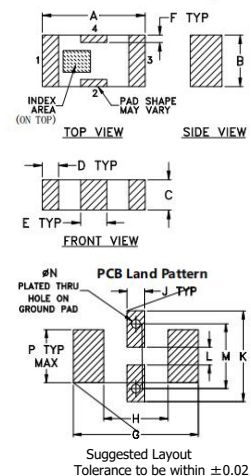
RF IN	1
RF OUT	3
GROUND	2,4

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