



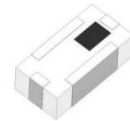
Features

- low cost
- small size
- temperature stable
- excellent power handling, 7W
- hermetically sealed

Applications

- sub-harmonic rejection
- transmitters/receivers
- lab use

JY-HFCN-9700+



50Ω 9700 to 16980 MHz

Electrical Specifications¹ at 25°C

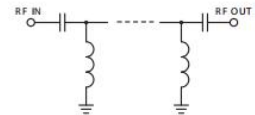
STOP BAND (MHz)		FCO ₀ (MHz) Nom.	PASS BAND (MHz)		VSWR (:1)		POWER INPUT (W)	NO. OF SECTIONS
(Loss>25dB) Typ.	(Loss>18dB) Min.	(Loss 3dB) Typ.	(Loss<2dB) Max.	(Loss<3dB) Max.	Stopband Typ.	Frequency (MHz) 1.5:1	Max	
6770	7550	9070	11460-16570	9700-16980	20:1	9700-16980	7	5

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)
50	61.91	1737.18
1000	38.60	1500.37
1960	35.58	157.93
3250	40.06	69.49
4170	39.69	32.79
5020	26.83	27.16
6680	22.27	25.72
7570	20.04	21.40
9750	3.03	1.47
10500	1.92	1.46
11580	1.17	1.34
12610	1.73	1.40
13530	1.95	1.52
14550	1.65	2.03
17000	2.01	2.11

Functional Schematic



Pad Connections

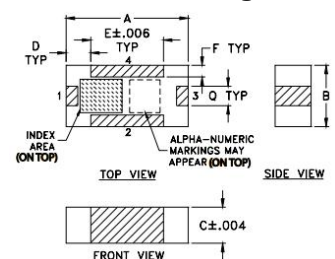
Input	1
Output	3
Ground	2,4

Maximum Ratings

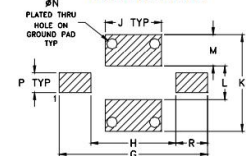
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	7W at 25°C

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

Outline Drawing



PCB Land Pattern

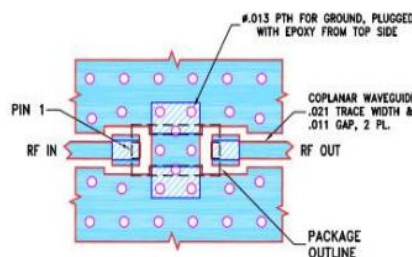


Suggested Layout
Tolerance to be within ±0.02

Outline Dimensions: Unit (mm)

A	3.20	B	1.60	C	0.94
D	0.66	E	1.91	F	0.30
G	4.62	H	2.64	J	1.75
K	3.02	L	1.04	M	0.99
N	0.33	P	0.61	Q	0.51
R	0.99	wt	0.020g		

Suggested PCB Layout



NOTES:

1. TRACE WIDTH & GAP PARAMETERS ARE SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .010±.001. 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.

