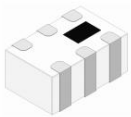
High Pass Filter

JY-HFCN-3100+

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

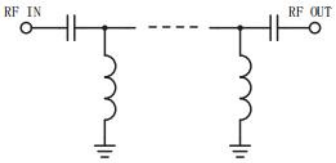
Applications
- sub-harmonic rejection
- transmitters/receivers
- base station of mobile communication and lab use



Generic photo used for illustration purposes only

50 Ω 3400 to 9900 MHz

electrical schematic



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

STOP BAND (MHz) (Loss>30dB)	STOP BAND (MHz) (Loss>20dB)	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
2400	2350	3020	3500-9500	3400-11000	20:1	3100-9000	7	5

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	2,4,5,6

Maximum Ratings

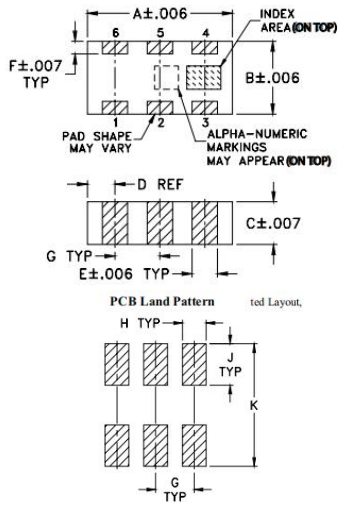
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	7W at 25°C

* 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)	Return Loss (dB)	VSWR (:1)
50.53	60.36	228.3
800.00	39.11	57.97
1810.00	34.57	39.13
2350.00	38.81	26.36
2400.00	33.80	24.54
2700.00	15.08	13.52
2920.00	5.46	4.26
3100.00	1.89	1.50
3400.00	1.19	1.38
3500.00	1.14	1.45
5000.00	0.65	1.13
7000.00	0.62	1.12
9000.00	0.82	1.53
9500.00	0.99	1.76
9900.00	1.55	1.96
10500.00	1.33	2.15
11000.00	1.30	1.98

Outline Drawing



Suggested Layout
Tolerance to be within ±0.05

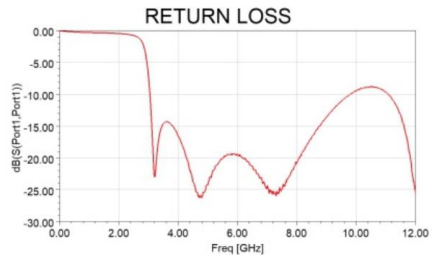
Outline Dimensions: Unit (mm)

A	3.20	B	1.60	C	0.89
D	0.61	E	0.56	F	0.28
G	0.99	H	0.61	J	1.07
K	3.12	wt	0.02g		

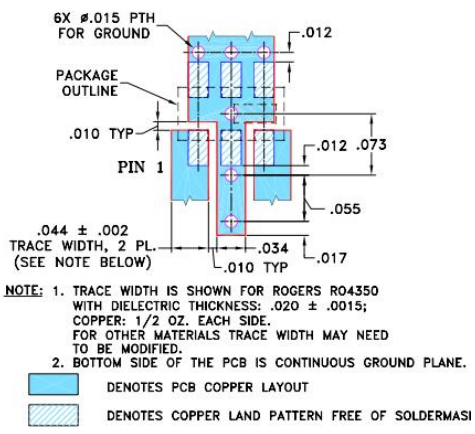
INSERTION LOSS



RETURN LOSS



Suggested PCB Layout



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