

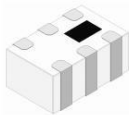
Features

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

Applications

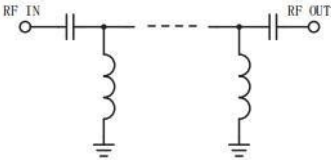
- sub-harmonic rejection
- transmitters/receivers
- base station of mobile communication and lab use

HT-HFCN-3500+



50 Ω 3900 to 9800 MHz

electrical schematic



Pin Connections

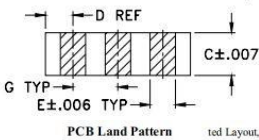
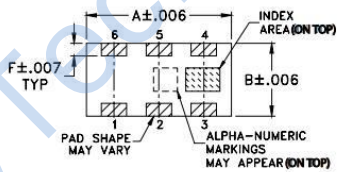
RF IN	1
RF OUT	3
GROUND	2,4,5,6

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.

Outline Drawing



Suggested Layout
Tolerance to be within ±0.02

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		

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

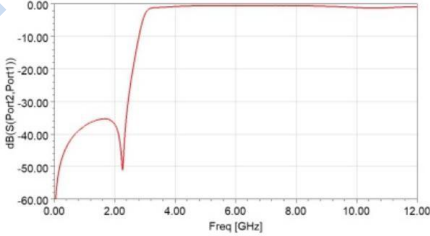
STOP BAND (MHz)		FCO ₀ (MHz) Nom.	PASS BAND (MHz)		VSWR (:1)		POWER INPUT (W)	NO. OF SECTIONS
(Loss> 30dB)	(Loss> 20dB)	(Loss 3dB) Typ.	(Loss<1.3dB) Max.	(Loss<2dB) Typ.	Stopband Frequency (MHz) 1.6:1			
2400	2350	3020	3500-9500	3400-11000	20:1	3100-9000	7	5

Measured on Fenghua Characterization Test Board T-39.

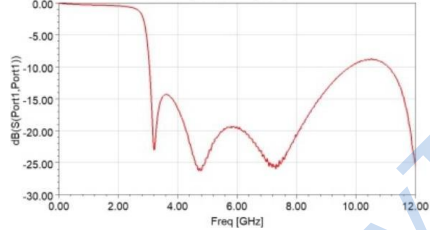
Typical Performance Data at 25° C

Frequency (MHz)	Return Loss (dB)	VSWR (:1)
50.50	60.37	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	1.31	1.98

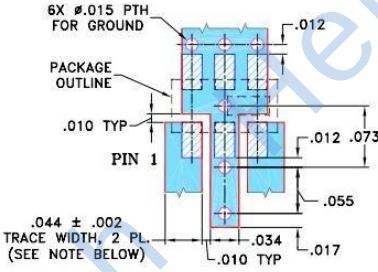
INSERTION LOSS



RETURN LOSS



Demo Board P/N: TB-285
Suggested PCB Layout (PL-158)



NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS R04350 WITH DIELECTRIC THICKNESS: .020 ± .0015; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

■ DENOTES PCB COPPER LAYOUT
■ DENOTES COPPER LAND PATTERN FREE OF SOLDERMASH