

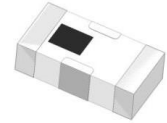
## Features

- 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-740+



50 Ω 780 to 2800 MHz

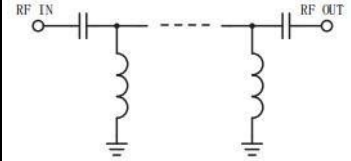
### Electrical Specifications (T<sub>AMB</sub>= 25° C)

STOP BAND (MHz)		FCO(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 Frequency (MHz) Typ. 1.5:1			S
430	550	740	900-2200	780-2800	20:1	740-3200	7	7

### Typical Performance Data at 25° C

Frequency (MHz)	Return Loss (dB)	Insertion Loss (dB)	VSWR (:1)
1	0.04	84.12	394.81
100	0.20	48.83	86.78
430	0.49	36.31	35.35
550	0.77	30.92	22.51
740	24.21	2.84	1.13
780	21.06	2.11	1.19
900	27.17	1.29	1.09
1900	14.74	0.84	1.45
2200	16.31	0.80	1.36
2800	34.91	0.78	1.04
3200	20.19	0.89	1.22
4000	11.26	1.38	1.75

### electrical schematic



### Pin Connections

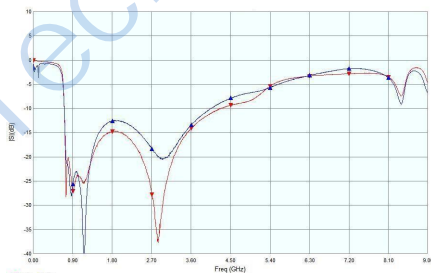
RF IN	1
RF OUT	3
GROUND	2,4

### Maximum Ratings

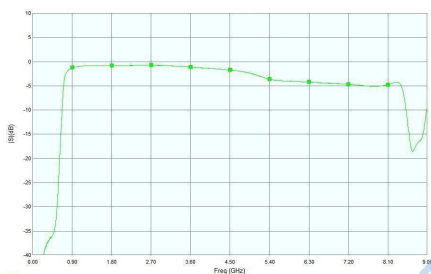
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input	7W at 25°C

\* Passband rating, operate linearly to 5.0W at 100°C ambient. Permanent damage may occur if any of these limits are exceeded.

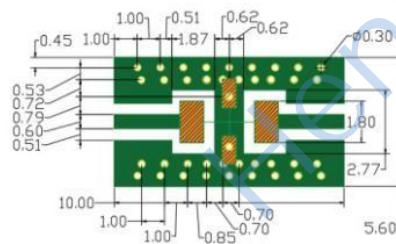
HT-HFCN-740+.s2p



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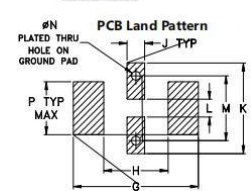
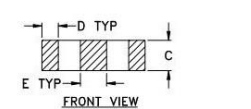
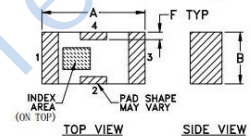


### Demo Board MCL P/N: T-39 Suggested PCB Layout (PL-137)



- ES:**
1. COPLANAR WAVEGUIDE PARAMETERS ARE SHOWN FOR ROGERS R04350 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.

### Outline Drawing



Suggested Layout  
Tolerance to be within ±0.02

### 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