

# High Pass Filter

50Ω 2900 to 8700 MHz

## HFCN-2700A+



CASE STYLE: FV1206-1

**+RoHS Compliant**

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

Available Tape and Reel at no extra cost  
 Reel Size 7" Devices/Reel 20, 50, 100, 200, 500, 1000, 3000

### Maximum Ratings

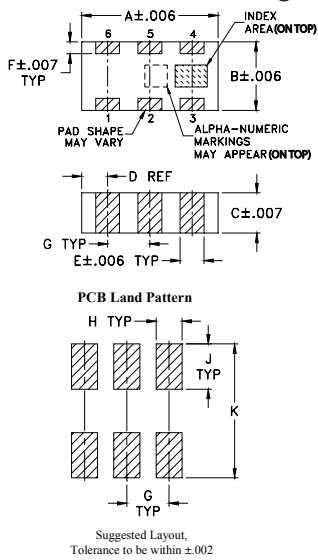
Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	7W max. at 25°C

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

### Pin Connections

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

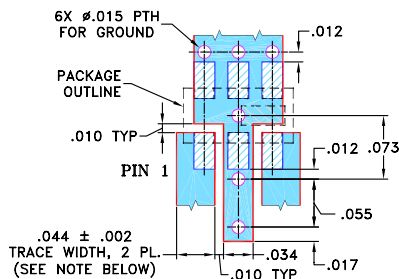
### Outline Drawing



### Outline Dimensions (inch)

A	B	C	D	E	F
.126	.063	.035	.024	.022	.011
3.20	1.60	0.89	0.61	0.56	0.28
G	H	J	K	wt	
.039	.024	.042	.123	grams	
0.99	0.61	1.07	3.12	.020	

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



- Notes
- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

### Features

- Low cost
- Small size
- 5 sections
- Temperature stable
- Excellent power handling, 7W
- Hermetically sealed LTCC construction
- Protected by US Patent 7,760,485

### Applications

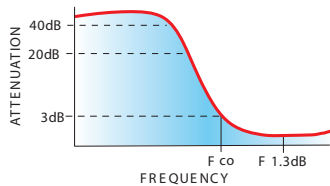
- Sub-harmonic rejection
- Transmitters / receivers

### Electrical Specifications<sup>(1,2)</sup> at 25°C

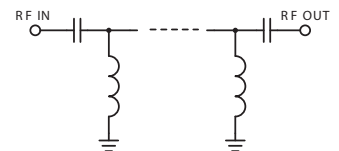
STOPBAND (MHz)	f <sub>co</sub> , MHz Nom.	PASSBAND (MHz)	VSWR Typ.	POWER INPUT (W)	NO. OF SECTIONS
(Loss > 30dB) Typ.	(Loss > 20dB) Min.	(Loss < 1.5dB) Max.	Frequency (MHz) Stopband 1.5:1	Max.	
2270	2150	3070-8500 2900-8700	20:1	3400-9000	5

- (1) In Application where DC voltage is present at either input or output ports, coupling capacitors are required. Alternatively, Mini-Circuits' "D" suffix version of this model will provide >100 MOhm isolation to ground.  
 (2) Measured on Mini-Circuits Characterization Test Board TB-285.

### typical frequency response



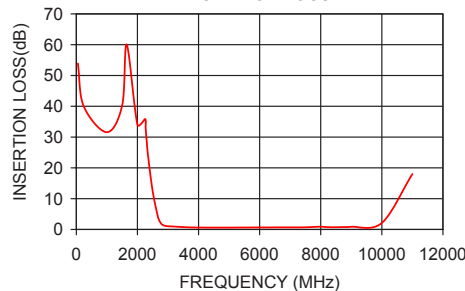
### electrical schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	53.91	1737.18
240	40.00	1737.18
1000	31.58	157.93
1650	60.06	69.49
2150	37.69	32.79
2270	32.83	27.16
2700	3.27	2.72
3000	1.04	1.40
3070	1.00	1.47
3400	0.82	1.46
6000	0.66	1.34
8500	0.73	1.40
8700	0.77	1.44
9000	0.87	1.52
10000	2.13	2.49
11000	18.01	11.31

HFCN-2700A+ INSERTION LOSS



HFCN-2700A+ VSWR

