

LTCC

# High Pass Filter

50Ω 4900 to 5850 MHz

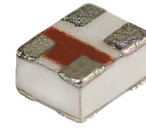
## Features

- Miniature size 0202 (0.026"[0.65mm] x 0.020"[0.5mm] x 0.015"[0.37mm])
- Low Insertion Loss, 0.4 dB typ.
- Low cost
- Aqueous washable

## Applications

- ISM Band
- WLAN
- Bluetooth
- Zigbee

HPSC-492R+



CASE STYLE: SC0202C

**+RoHS Compliant**

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

## Electrical Specifications at 25°C

Parameter		Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss <sup>1</sup>	4900 - 5850	—	0.4	0.65	dB
	VSWR	4900 - 5850	—	1.2	2.0	:1
Stop Band	Rejection Loss	500 - 2400	—	25	—	dB
		2400 - 2500	20	34	—	

1. Tested on Evaluation Board TB-1029+

## Block Diagram



## Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature <sup>2</sup>	-40°C to 85°C
RF Power Input <sup>3</sup>	2W at 25°C

2. Refer to product storage temperature after installation  
Suggestion for T&R unused product storage condition:

+5 ~ +35 °C, Humidity 45~75%RH, 12 month Max

3. Derate linearly to 1W at 85°C

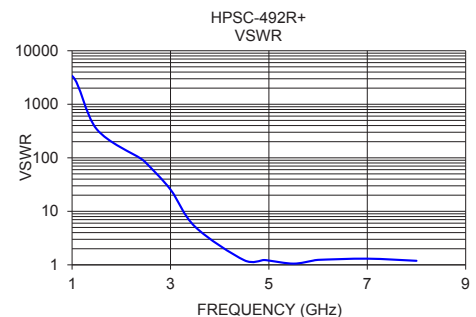
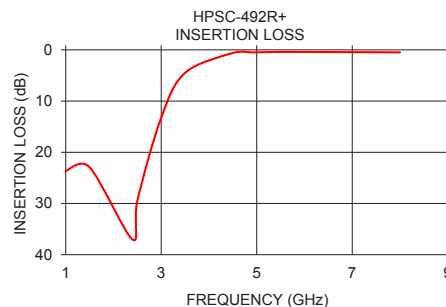
## Typical Performance Data at 25°C<sup>4</sup>

Frequency (GHz)	Insertion Loss (dB)	VSWR (:1)
0.50	28.43	1801.42
1.00	23.69	3371.52
1.50	22.93	342.70
2.40	37.06	96.25
2.50	29.47	80.87
3.00	13.24	25.53
3.50	4.50	5.15
4.50	0.61	1.22
4.90	0.51	1.23
5.00	0.48	1.20
5.50	0.40	1.05
5.90	0.41	1.20
6.00	0.41	1.24
7.00	0.44	1.30
8.00	0.49	1.19

4. Measured with Agilent E5071B network analyzer using impedance conversion and port extension.

## Pad Connections

Input	2
Output	1
Ground	3,4



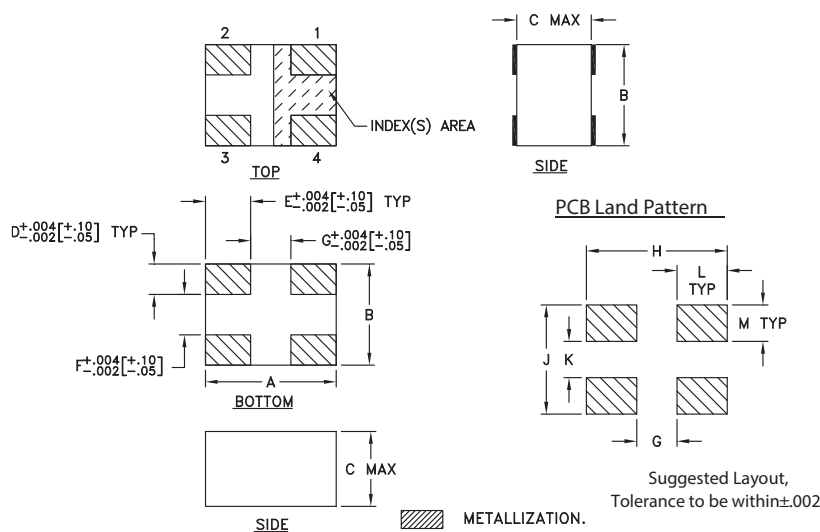
www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

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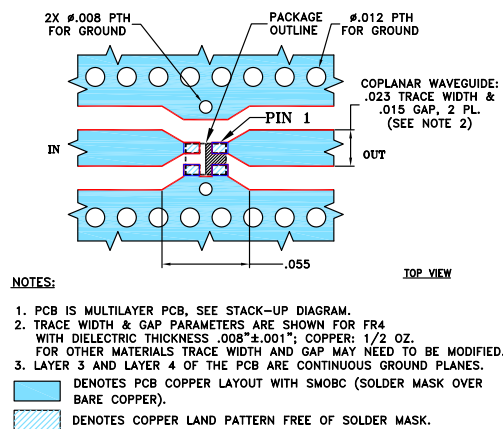
# High Pass Filter

# HPSC-492R+

## Outline Drawing



## Evaluation Board MCL P/N: TB-1029+ Suggested PCB Layout (PL-567)



## Outline Dimensions (inch mm)

A	B	C	D	E	F	G
.026	.020	.015	.006	.009	.008	.008
0.66	0.51	0.38	0.15	0.23	0.20	0.20

H	J	K	L	M	wt
.028	.021	.007	.010	0.007	grams
0.71	0.53	0.18	0.25	0.18	0.0005

## Additional Notes

- 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.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
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