# Surface Mount **High Pass Filter**

50Ω 1225 to 4000 MHz

## **THP-1225+**

## **The Big Deal**

- Small size (0.25" X 0.25" X 0.10")
- Good matching
- Low insertion loss



Generic photo used for illustration purposes only CASE STYLE: GQ1018

### **Product Overview**

THP-1225+ is a 50 $\Omega$  high pass filter fabricated using SMT technology. This high pass filter covers from 1225 to 4000 MHz. This series of filters are constructed in a tiny package offering dual advantage of superior lumped element filter performance in a space saving SMT package. These models are suitable for mass production without losing flexibility of small volume requirements. It has repeatable performance across lots and consistent performance across temperature.

## **Key Features**

Feature	Advantages
Low insertion loss	Can be used in high performance applications.
Good rejection	This enables the filter to attenuate spurious signals and reject harmonics for broad band frequency.
Small size, 0.25" X 0.25" X 0.10"	The small surface mount package enables the THP-1225+ to be used compact designs.

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. G. The parts covered by this specification document are subject to Mini-Circuits trandard 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



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

# Surface Mount **High Pass Filter**

50Ω

1225 to 4000 MHz

## THP-1225+



Generic photo used for illustration purposes only CASE STYLE: GQ1018

#### **Features**

- · Low insertion loss
- · Good matching
- Small size ( 0.25" X 0.25" 0.10" )

#### Electrical Specifications at 25°C

Pa	rameter	F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
Stop Band	Rejection Loss	DC-F1	DC-720	20	30	-	dB
	VSWR	DC-F1	DC-720	-	20	-	:1
Pass Band	Insertion Loss	F2-F3	1225-4000	-	0.5	2.0	dB
	VSWR	F2-F3	1225-4000	-	1.3	1.92	:1

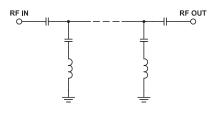
#### **Applications**

- Radio navigation satellite
- · Land mobile
- · Space research

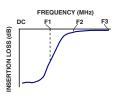
Maximum	Ratings
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5 W max.
	A.0. 12 12 1

Permanent damage may occur if any of these limits are exceeded.

#### **Functional Schematic**



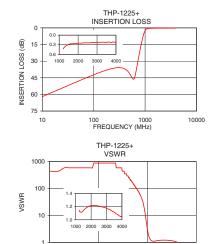
#### **Typical Frequency Response**

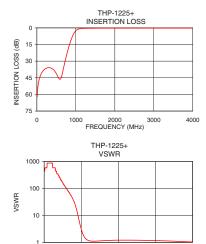


+RoHS Compliant The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

#### Typical Performance Data at 25°C

Frequency	Insertion Loss	VSWR (:1)	
(MHz)	(dB)		
10	62.03	434.30	
75	44.66	579.06	
100	42.30	868.59	
250	36.27	579.06	
450	38.61	217.15	
550	44.57	124.09	
630	44.28	86.86	
675	37.86	69.49	
720	30.72	56.04	
750	26.31	46.96	
790	20.92	36.20	
825	16.64	27.59	
900	8.79	11.53	
930	6.30	7.56	
970	3.76	4.38	
1050	1.29	1.96	
1100	0.78	1.48	
1225	0.43	1.15	
3000	0.22	1.17	
4000	0.22	1.05	





1000 2000 3000 FREQUENCY (MHz)

0

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

10

### Mini-Circuits

100 1000 FREQUENCY (MHz)

10000

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

REV. B ECO-005139 THP-1225+ EDU1761 UBJ 201201 Page 2 of 3

4000