# Coaxial Low Pass Filter

# **50**0

# \*DC to 490 MHz

## **Maximum Ratings**

0		
Operating Temperature	-55°C to 100°C	
Storage Temperature	emperature -55°C to 100°C	
RF Power Input*	8.5W max. at 25°C	
DC Current Input to Output	0.5A max. at 25°C	

\* Passband rating, derate linearly to 3.5W at 100°C ambient. Permanent damage may occur if any of these limits are exce

#### **Features**

- rugged uni-body construction, small size
- 7 sections
- excellent power handling, 8.5W
- temperature stable
- low cost
- protected by U.S. Patent 6,943,646

## **Applications**

- harmonic rejection
- transmitters/receivers
- lab use

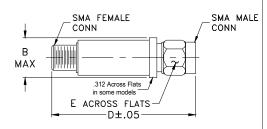




Generic photo used for illustration purposes only CASE STYLE: FF704 Model Connectors SMA VLF-490+

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

# **Outline Drawing**



# Outline Dimensions (inch)

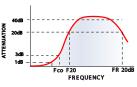
В	D	E	wt
.410	1.43	.312	grams
10.41	36.32	7.92	10.0

PASSBAND STOP BAND (MHz) fco, MHz VSWR (MHz) Nom. (loss, dB) (:1) (loss < 1.2 dB) (loss 3 dB) f 20 40 fr 20 Stopband Passband Max Тур. Min Тур Тур Тур. Тур \*DC-490 650 800 880-2500 6000 20 1.2

Electrical Specifications at 25°C

\* Not for use with DC voltage at input and output ports

# typical frequency response

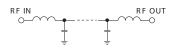


#### electrical schematic

NO. OF

SECTIONS

7



VI F-490

VSWR

2000

3000

FREQUENCY (MHz)

4000

5000

## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
1	0.05	1.01
100	0.25	1.07
490	0.84	1.11
600	1.51	1.43
650	2.34	1.80
700	4.86	3.03
730	9.44	5.66
765	19.23	10.56
800	33.99	14.03
880	43.69	18.90
1500	67.73	45.72
2500	48.73	52.65
3500	36.46	52.65
5000	23.74	44.55
6000	22.90	43.44



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-Circuit's website at www.minicircuits.com/WCLStore/terms.jsp

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6000

# Mini-Circuits

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