Coaxial

Low Pass Filter

VLFX-470

DC to 470 MHz (40 dB Isolation up to 20 GHz)

Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	10W max. at 25°C

**Passband rating, derate linearly to 3.5W at 100°C ambient.*

Features

- very good isolation, 40 dB up to 20 GHz
- 21 sections
- excellent power handling, 10W
- temperature stable LTCC internal structure
- re-entry frequency > 20 GHz
- rugged unibody construction
- protected by US patent 6,943,646

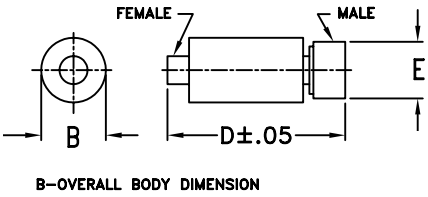
CASE STYLE: FF1118

Connectors	Model	Price	Qty.
SMA	VLFX-470-S	$39.95 ea.	(1-9)

Applications

- harmonic rejection
- transmitters/receivers
- lab use
- test instrumentation

Outline Drawing

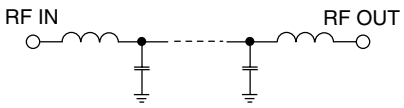


B–OVERALL BODY DIMENSION

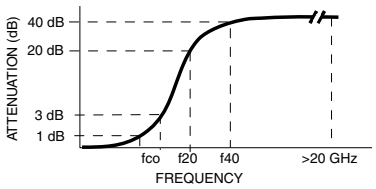
Outline Dimensions (inch / mm)

B	D	E	wt.
.39	2.67	.312	grams
9.91	67.82	7.92	17.0

Functional Schematic



Typical Frequency Response

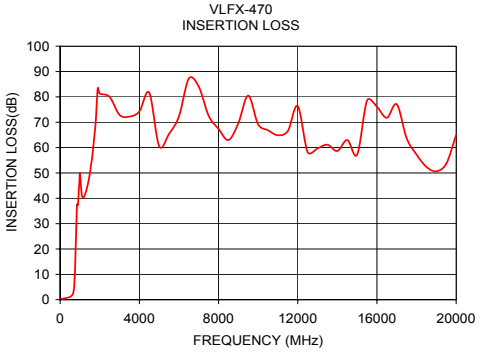


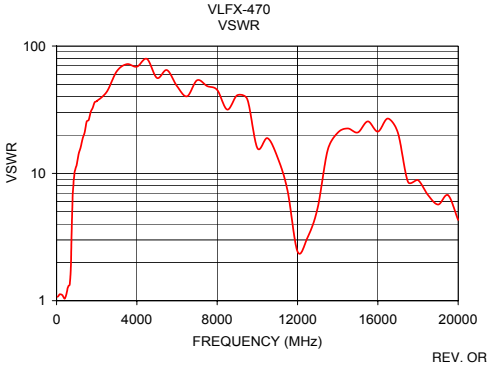
Low Pass Filter Electrical Specifications @ 25°C

MODEL NO.	PASSBAND (MHz) (Loss < 1.2dB) Max.	fco, MHz Nom (Loss 3 dB) Typ	STOPBAND (MHz) (Loss, dB) f20 Min.	STOPBAND (MHz) (Loss, dB) f40 Typ.	VSWR (:1) Stopband Typ.	VSWR (:1) Passband Typ.	NO. OF SECTIONS
VLFX-470	DC-470	675	820	1000-20000	10	1.15	21

Typical Performance Data @ 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.39	1.07
150	0.39	1.12
320	0.72	1.08
470	1.03	1.10
520	1.23	1.18
575	1.57	1.28
675	3.47	1.49
740	9.89	2.85
820	30.11	7.38
925	40.83	10.64
975	47.08	11.29
1000	49.80	11.57
2500	79.98	43.65
5000	60.62	56.18
7500	72.60	48.49
10000	69.11	15.82
12500	58.22	3.13
15000	57.24	20.96
17500	63.67	8.59
20000	64.93	4.31





Mini-Circuits®

INTERNET http://www.minicircuits.com

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

REV. OR
M97278
VLFX-470
EDU-0399
ED-11930A/7
URJ/AD/CP
060605