Coaxial

Low Pass Filter

VLFX-470

50Ω 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.
Permanent damage may occur if any of these limits are exceeded.

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

Applications

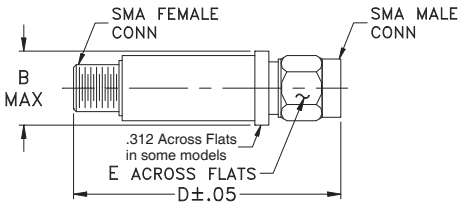
- harmonic rejection
- transmitters/receivers
- lab use
- test instrumentation

CASE STYLE: FF1118

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

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

Outline Drawing



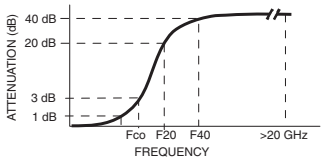
Outline Dimensions (inch / mm)

B	D	E	wt.
.410	**2.67**	**.312**	**grams**
10.41	67.82	7.92	17.0

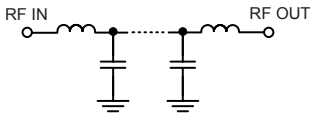
Low Pass Filter Electrical Specifications @ 25°C

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 Frequency Response



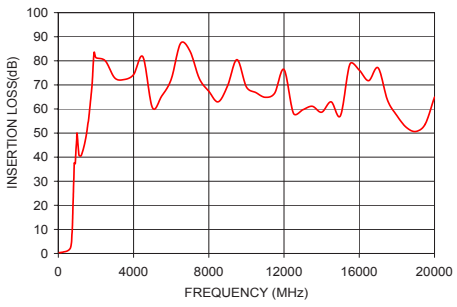
Functional Schematic



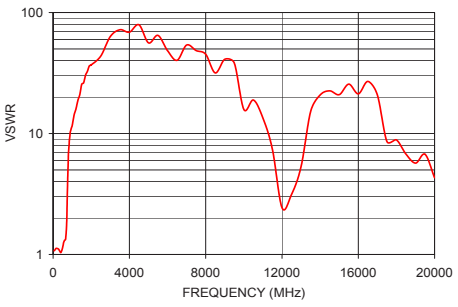
Typical Performance Data @ 25°C

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

VLFX-470
INSERTION LOSS



VLFX-470
VSWR



REV. A
M131810
VLFX-470
EDU-0399
ED-11930A/7
URJ/AD/CP
130319