Coaxial
Low Pass Filter

VLFX-1350

50Ω   DC to 1350 MHz (40 dB Isolation up to 20 GHz)
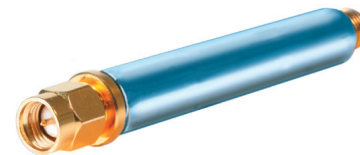
Maximum Ratings

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-1350	$39.95 ea.	(1-9)

Outline Drawing

SMA FEMALE CONN
SMA MALE CONN
B MAX
.312 Across Flats in some models
E ACROSS FLATS
D±.05

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-1350	DC-1350	2050	2425	2600-20000	10	1.3	21

Typical Frequency Response

ATTENUATION (dB)
40 dB
20 dB
3 dB
1 dB
Fco F20 F40   >20 GHz
FREQUENCY
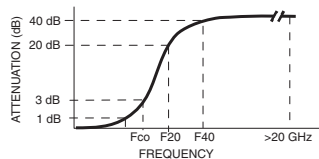
Functional Schematic

RF IN   RF OUT
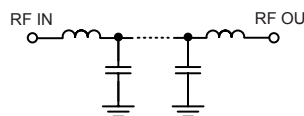
Typical Performance Data @ 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
50	0.30	1.11
250	0.20	1.09
500	0.42	1.16
1000	0.76	1.14
1350	1.04	1.29
1500	1.18	1.27
1800	1.66	1.29
2050	3.17	1.52
2200	9.27	3.96
2425	37.39	12.66
2600	40.80	17.87
3000	76.88	27.55
4000	81.43	29.27
5000	78.41	46.43
7500	74.23	25.88
10000	79.16	41.61
12500	63.92	15.38
15000	55.14	9.11
17500	70.26	9.10
20000	63.12	11.15

VLFX-1350
INSERTION LOSS

VLFX-1350
VSWR
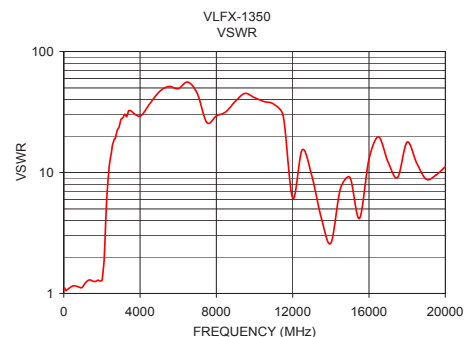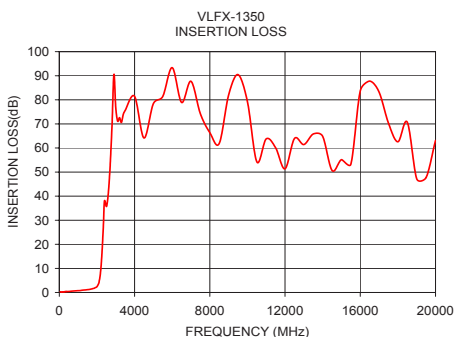
Mini-Circuits®
ISO 9001 ISO 14001 AS 9100 CERTIFIED

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

IF/RF MICROWAVE COMPONENTS