Linear Phase Lowpass
Custom Built LC Filters - 1 KHz to 100 MHz

lplpPrinter

- VERY LOW PULSE DISTORTION (Low Overshoot and Ringing, Fast Settling Time)
- Types: Bessel, Gaussian, Equal Phase Ripple and Transitional (Gaussian to 6dB)

.25dB Maximum Ripple
1dB Maximum Insertion Loss

GROUP DELAY = NORMALIZED (GROUP DELAY) / (sec.) 2p F_c (Hz)

The above graph illustrates the delay characteristics for this family of filters. The table lists typical realizable values for all the electrical specifications.

Shape Factor	Man. Phase Distortion (Degrees)	Maximum Overshoot (Percent)	Typical Delay Variation (± Percent)
A	± 1.5	1.5%	2.0%
B	± 1.5	1 .5%	2.0%
C	± 1.5	1 .5%	2.0%
D	* 3.0	3.0%	7.0%
E	± 7.0	6.0%	12.0%
F	±12.0	9.0%	16.0%

- Frequency Range: 1KHz to 100MHz
- **Impedance Range:** 50 ohms to 20K ohms
- Low Delay and Phase Distortion in Passband
- **Construction:** Epoxy encapsulated or sealed in metal can

SIZE (INCHES)

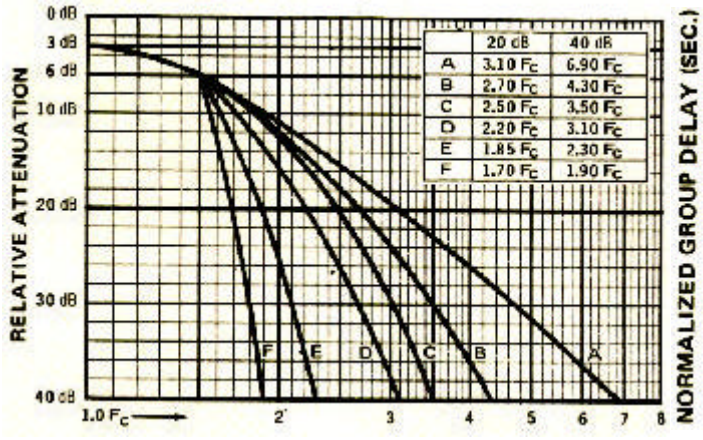
Units normally in metal cans for printed circuit mounting (or end terminals). SMA connectors same size. BNC connectors may require larger cans.

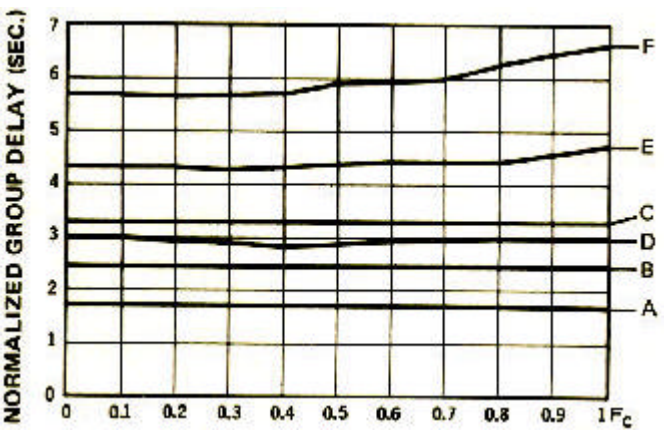
	Metal Cans	Encapsulated in Epoxy Case:	
	L x W x H		L x W x H
K1	2.00 x 1.1 25 x .750	W	2.50 x 1.125 x .750
K2	2.50 x 1.1 25 x .750	X	3.00 x 1.500 x 1.000
K3	3.00 x 1.125 x .750	X1	3.00 x 2.000 x 1.000
M	3.00 x 1.625 x 1.125	Y	4.00 x 1.500 x 1.125
M1	3.00 x 2.000 x 1.250	Y1	4.00 x 2.000 x 1.250
N	4.00 x 1.500 x 1.250	Z	4.50 x 2.500 x 1.375
N1	4.00 x 2.000 x 1.250		

This family of Linear Phase Lowpass Filters can find applications in every branch of electronics because of their electrical specifications and low cost. They are ideally suited for amplitude, phase and delay matching requirements. The industry-wide increase in data transmission has increased the demand for linear phase designs with good shape factors.

DELIVERY: PROTOTYPES CAN OFTEN BE DELIVERED IN LESS THAN 7 DAYS. CALL FOR SPECIAL SIZES.

ORDER ANY CUT-OFF FREQUENCY FROM 1KHz TO 100MHz. INTERPOLATION BETWEEN TABULATED DATA ALLOWABLE.





Cut-Off (F_c) Frequency 3dB Max.	Impedance Range (Ohms)	Shape Factor (See Graph)	Size	
			Epoxy	Metal
1KHz	500-10K	A	X1	M1
	500-10K	B	Y1	N1
	500-10K	C	Z	—
	500-10K	D	X1	M1
	500-10K	E	Y1	N1
	500-10K	F	*2.*	—
5KHz	50-20K	A	X1	M1
	50-20K	B	Y	N
	50-15K	C	Y1	N1
	50-20K	D	X1	M1
	50-20K	E	Y1	N1
	50-10K	F	Z	—
10KHz	50-10K	A	X	M
	50-10K	B	Y	N
	50-10K	C	Y	N
	50-10K	D	X	M
	50-10K	E	Y	N
	50-10K	F	Y1	N1
50KHz	50-10K	A	W	K2
	50-10K	B	X	M
	50- 5K	C	Y	N
	50-10K	D	W	K2
	50-10K	E	X	M
	50-10K	F	Y	N
100KHz	50-1 OK	A	W	K2
	50- 5K	B	X	M
	50- 5K	C	Y	N
	50-10K	D	W	K2
	50-10K	E	X	M
	50-10K	F	Y	N
500KHz	50- 3K	A	W	K2
	50- 3K	B	W	K2
	50- 1K	C	X	M
	50- 5K	D	W	K2
	50- 5K	E	X	M
	50- 5K	F	Y	N
750KHz	50- 2.5K	A	W	K2
	50- 2.5K	B	X	M
	50- 1K	C	Y	N
	50- 5K	D	W	K2
	50- 5K	E	X	M
	50- 5K	F	X	M
1MHz	50-500	A	W	K2
	50-500	B	X	K3
	50-500	C	—	M
	50-500	D	W	K2
	50-500	E	X	K3
	50-500	F	—	M
2MHz	50-500	A	—	K2
	50-500	B	—	K3
	50-500	C	—	M
	50-500	D	—	K2
	50-500	E	—	K3
	50-500	F	—	M

Cut-Off (F_c) Frequency 3dB Max.	Impedance Range (Ohms)	Shape Factor (See Graph)	Size	
			Epoxy	Metal
3MHz	50-500	A		K2
	50-500	B	—	K3
	50-400	C	—	M
	50-500	D	—	K2
	50-500	E	—	K3
	50-500	F	—	M
4MHz	50-500	A	—	K2
	50-500	B	—	K3
	50-200	C	—	M
	50-500	D	—	K2
	50-500	E	—	K3
	50-500	F	—	M
5MHz	50-500	A	—	K1
	50-500	B	—	K2
	50-200	C	—	M
	50-500	,_ D	—	K2
	50-500	E	—	K3
	50-500	F	—	K3
7.5MHz	50-500	A	—	K1
	50-250	B	—	K2
	50-100	C	—	M
	50-250	D	—	K1
	50-250	E	—	K2
	50-250	F	—	K3
10MHz	50-100	A	—	K1
	50-100	B	—	K2
	50-100	C	—	K3
	50-100	D	—	K1
	50-100	E	—	K2
	50-100	F	—	K3
25MHz	50-100	A	—	K1
	50-100	B	—	K2
	50-75	C	—	K3
	50-75	D	—	K1
	50-75	E	—	K2
	50-75	F	—	K3
40MHz	50	A	—	K2
	50	B	—	K3
	50	C	—	M
	50	D	—	K2
	50	E	—	K3
	50	F	—	M
50MHz	50	A	—	K2
	50	B	—	K3
	50	C	—	M
	50	D	—	K2
	50	E	—	K3
	50	F	—	M
100MHz	50	A	—	K2
	50	B	—	K3
	50	C	—	M
	50	D	—	K2
	50	E	—	K3
	50	F	—	M

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We are pleased to accept