

### Amplitude Response

Kemo Filter Response 8.13 is a modified 8 pole Elliptic type filter, it has sharp cut off  $> -80$  dB at  $2 F_c$ . This response is fitted to BenchMaster 8 filters, with switchable high and low pass on each channel. The modified responses Pulse and Flat are shown. Data shown is theoretical.

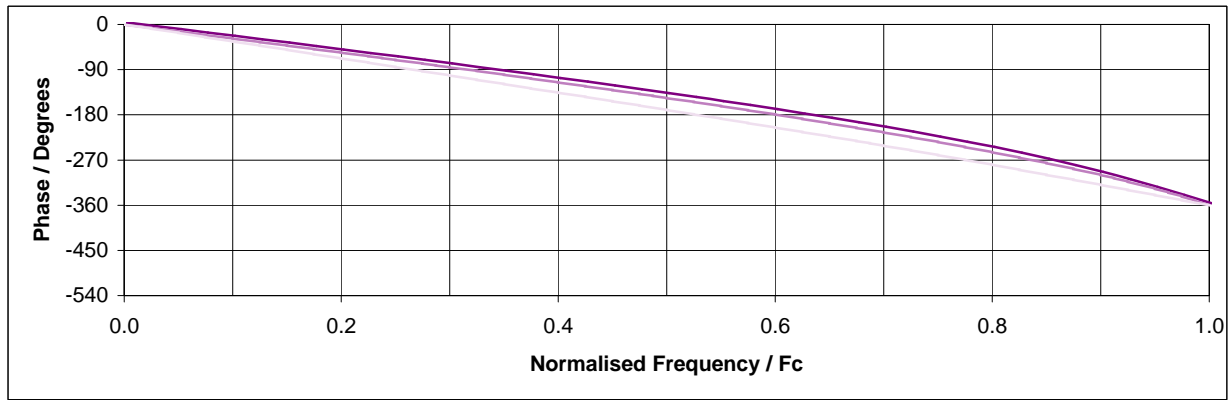
Response 8.13 (Flat) Data			
Equivalent Slope		93 dB / Octave	
Stopband (theoretical)		$> -93$ dB	
Overshoot (theoretical)		20.4 % at $1.325 / F_c$	
Risetime to 0.996		$1.103 / F_c$	
Mean phase line (theoretical)		$-277 f / F_c$	
Attenuation / dB	Normalised Frequency / $F_c$		Attenuation / dB
0.10	1.01	1.00	0.0
0.25	1.02	1.10	4.5
0.50	1.03	1.25	18.7
1.00	1.04	1.50	40.2
3.00	1.08	1.75	61.2
6.00	1.11	2	94.0
12.00	1.19	3	-
24.00	1.31	4	-
36.00	1.44	5	-
48.00	1.59	8	-
60.00	1.77	10	-
80.00	1.93	-	-

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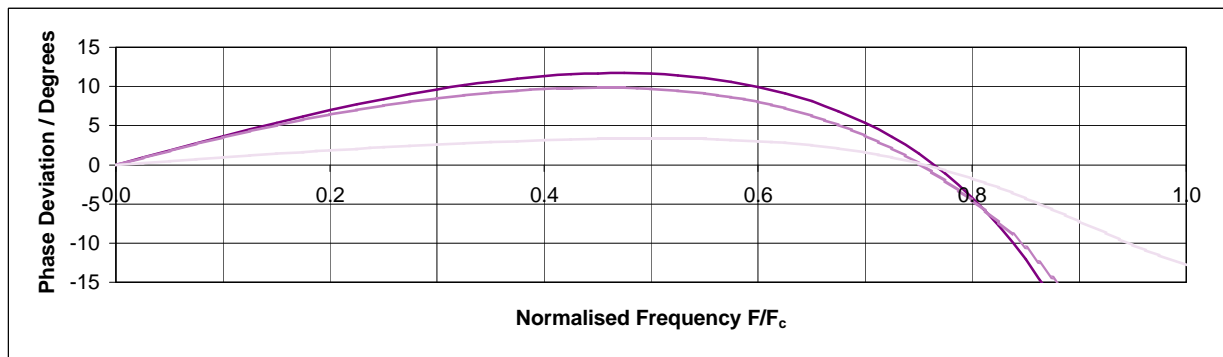
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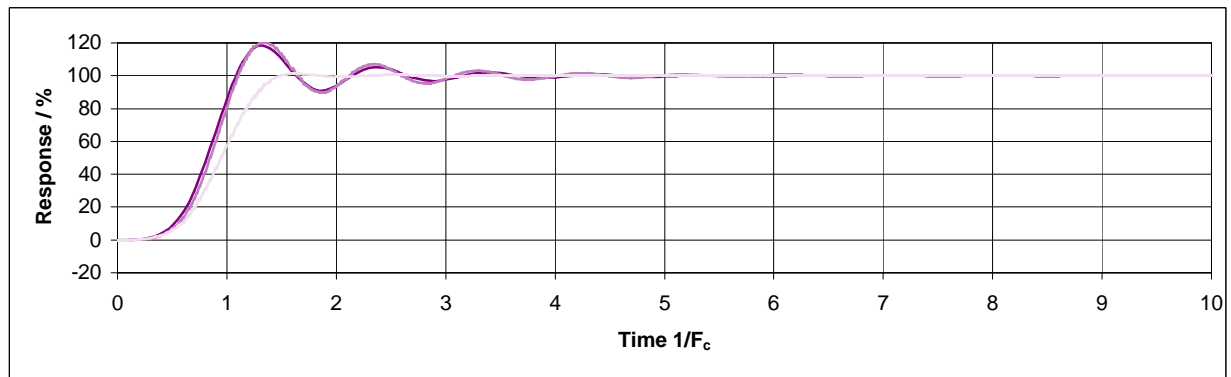
### Passband Phase Response

The Curve above shows the passband phase responses of the Kemo 8.13 filters.



### Passband phase deviation

The above curve shows the passband phase variation for the Kemo response 8.13 filters, this is the difference between the mean phase line and the passband phase response of the filter.



### Time Response to Step Input

The curve above shows the time response to a step input to the response 8.13 filter.  
Note The minimum overshoot of the pulse modified response.

**Note –  $F_c$  is cut-off frequency**

Due to continued product development Kemo Limited reserve the right to change specification without notice.

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