

### Amplitude Response

Kemo Filter Response 8.03 is a classic 8 pole Butterworth type filter. 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 is theoretical.

Response 8.03 (Butterworth) Data			
Equivalent Slope		48 dB / Octave	
Stopband (theoretical)		> -82.0 dB	
Overshoot (theoretical)		16.3 % at 1.35 / F <sub>c</sub>	
Risettime to 0.996		1.127 / F <sub>c</sub>	
Mean phase line (theoretical)		-321 f / F <sub>c</sub>	
Attenuation / dB	Normalised Frequency / F <sub>c</sub>		Attenuation / dB
0.10	0.78	1.00	3.0
0.25	0.84	1.10	7.5
0.50	0.88	1.25	15.6
1.00	0.92	1.50	28.2
3.00	1.00	1.75	38.9
6.00	1.06	2	48.0
12.00	1.19	3	76.4
24.00	1.41	4	-
36.00	1.69	5	-
48.00	2.00	8	-
60.00	2.38	10	-
80.00	3.10	-	-

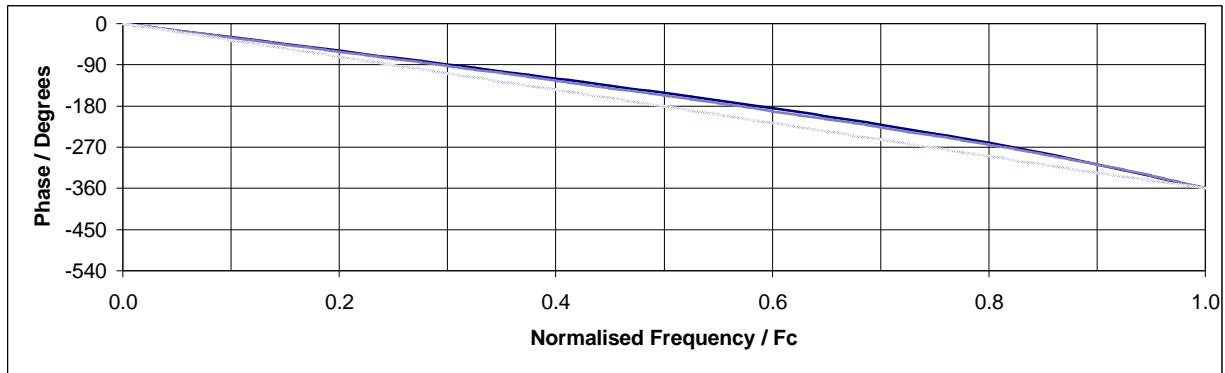
#### • Kemo Limited

3 Brook Court  
Blakeney Road  
Beckenham Kent BR3 1HG  
[www.kemo.com](http://www.kemo.com)  
Tel + 44 (0) 20 8658 3838  
Fax + 44 (0) 20 8658 4084

#### • Kemo Inc.

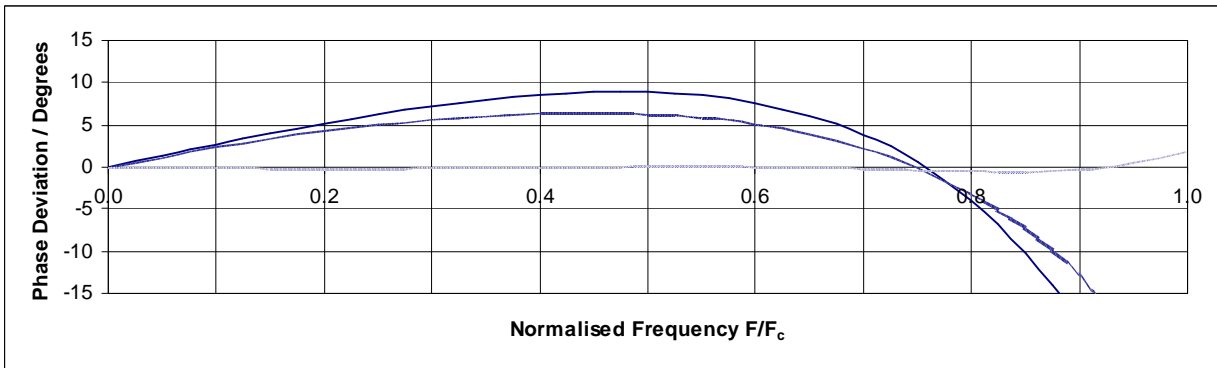
5 Northbrook Way  
Greenville  
SC 29615

Tel (864) 297 2522  
Fax (864) 675 1530  
fr\_803.doc



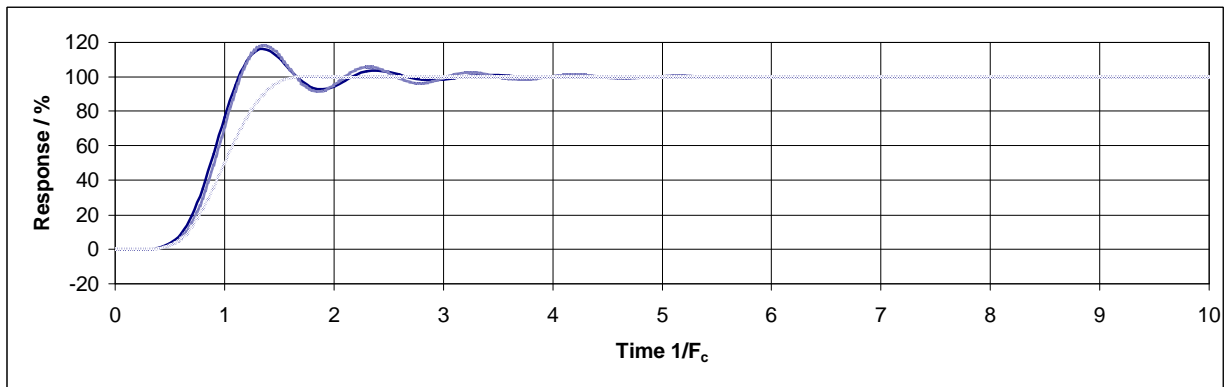
### Passband Phase Response

The Curve above shows the passband phase responses of the Kemo 8.03 filters.



### Passband phase deviation

The above curve shows the passband phase variation for the Kemo response 8.03 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 8.03 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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fr\_803.doc