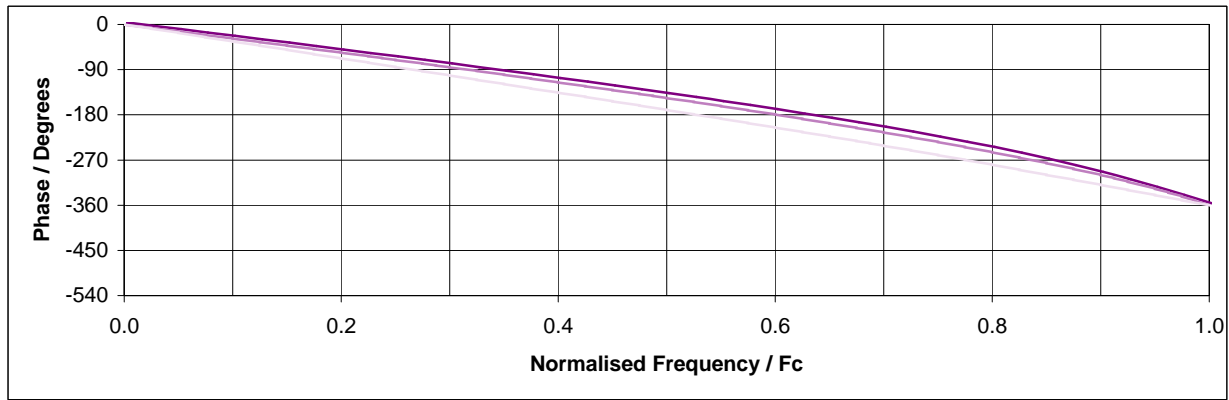


Amplitude Response

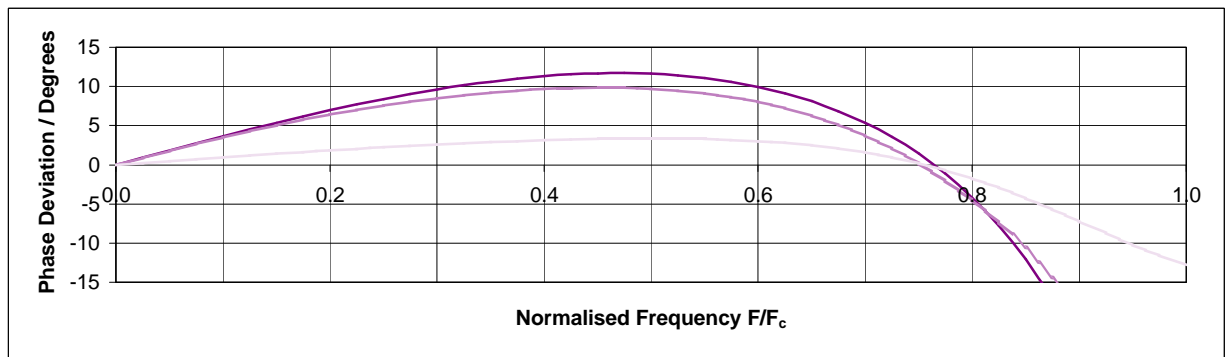
Kemo Filter Response 8.13 is a modified 8 pole Elliptic type filter, it has sharp cut off >-80 dB at $2 F_c$. This response is fitted to BenchMaster 8 filters, with switchable high and low pass on each channel. The modified responses Pulse and Flat are shown. Data shown is theoretical. This response is also available on the Benchmaster 21M as Option 13.

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	-	-



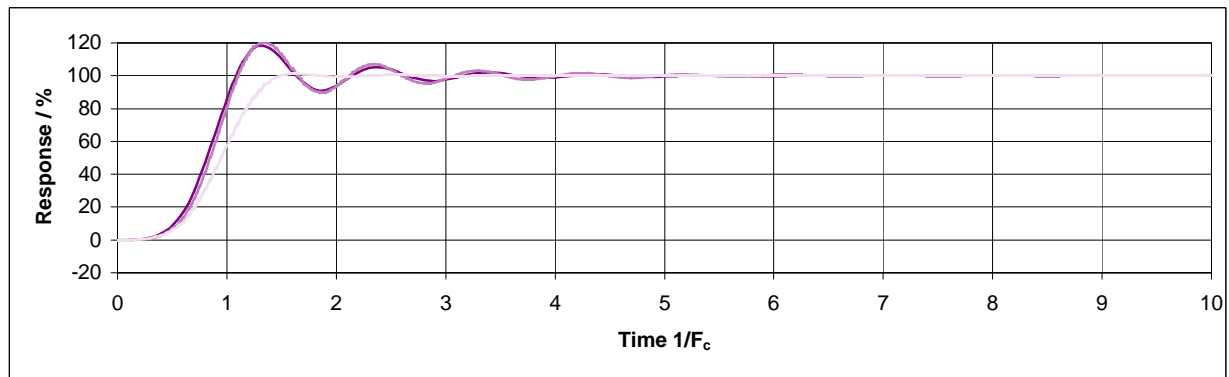
Passband Phase Response

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 reserves the right to change specification without notice.