



SAW Components

Data Sheet X 6855 M





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X 6855 M

Bandpass Filter

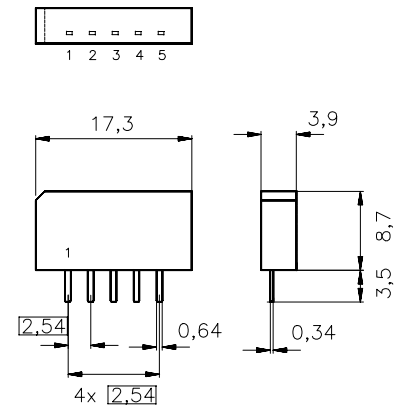
44,00 MHz

Data Sheet

Plastic package **SIP5K**

Terminals

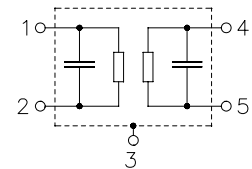
■ Tinned CuFe alloy



Dimensions in mm, approx. weight 1,0 g

Pin configuration

- 1 Input
- 2 Input - ground
- 3 Chip carrier - ground
- 4 Output
- 5 Output



Type	Ordering code	Marking and package according to	Packing according to
X 6855 M	B39440-X6855-M100	C61157-A1-A15	F61074-V8067-Z000

Maximum ratings

Operable temperature range	T_A	-25/+65	°C	
Storage temperature range	T_{stg}	-40/+85	°C	
DC voltage	V_{DC}	5	V	between any terminals
AC voltage	V_{pp}	10	V	between any terminals



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Characteristics

Reference temperature:	$T_A = 25 \text{ (45)} \text{ } ^\circ\text{C}$
Terminating source impedance:	$Z_S = 50 \text{ } \Omega$
Terminating load impedance:	$Z_L = 2 \text{ k}\Omega \parallel 3 \text{ pF}$

		min.	typ.	max.	
Center frequency	f_C	—	44,00	—	MHz
(center between 3 dB points)					
Insertion attenuation	α				
Reference level for the	44,06 (44,00) MHz	14,7	16,2	17,7	dB
following data					
Pass bandwidth					
$\alpha_{\text{rel}} \leq 3\text{dB}$	$B_{3\text{dB}}$	—	8,0	—	MHz
$\alpha_{\text{rel}} \leq 30\text{dB}$	$B_{30\text{dB}}$	—	9,6	—	MHz
Relative attenuation	α_{rel}				
	40,53 (40,47) MHz	—	0,3	—	dB
	47,59 (47,53) MHz	—	0,5	—	dB
	40,06 (40,00) MHz	1,7	2,9	4,1	dB
	48,06 (48,00) MHz	1,9	3,1	4,3	dB
Lower sidelobe					
	35,06 ... 38,06 (35,00 ... 38,00) MHz	40,0	46,0	—	dB
	38,06 ... 39,06 (38,00 ... 39,00) MHz	36,0	41,0	—	dB
Upper sidelobe					
	49,26 ... 55,06 (49,20 ... 55,00) MHz	40,0	46,0	—	dB
Reflected wave signal suppression					
1,2 μs ... 6,0 μs after main pulse		42,0	54,0	—	dB
(test pulse 250 ns, carrier frequency 44,06 MHz)					
Feedthrough signal suppression					
1,3 μs ... 1,2 μs before main pulse		50,0	56,0	—	dB
(test pulse 250 ns, carrier frequency 44,06 MHz)					
Group delay ripple (p-p)	$\Delta\tau$				
40,06 ... 48,06 (40,00 ... 48,00) MHz		—	40	—	ns
Impedance at 44,06 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	1,5 \parallel 16,8	—	k Ω \parallel pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	1,3 \parallel 5,6	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



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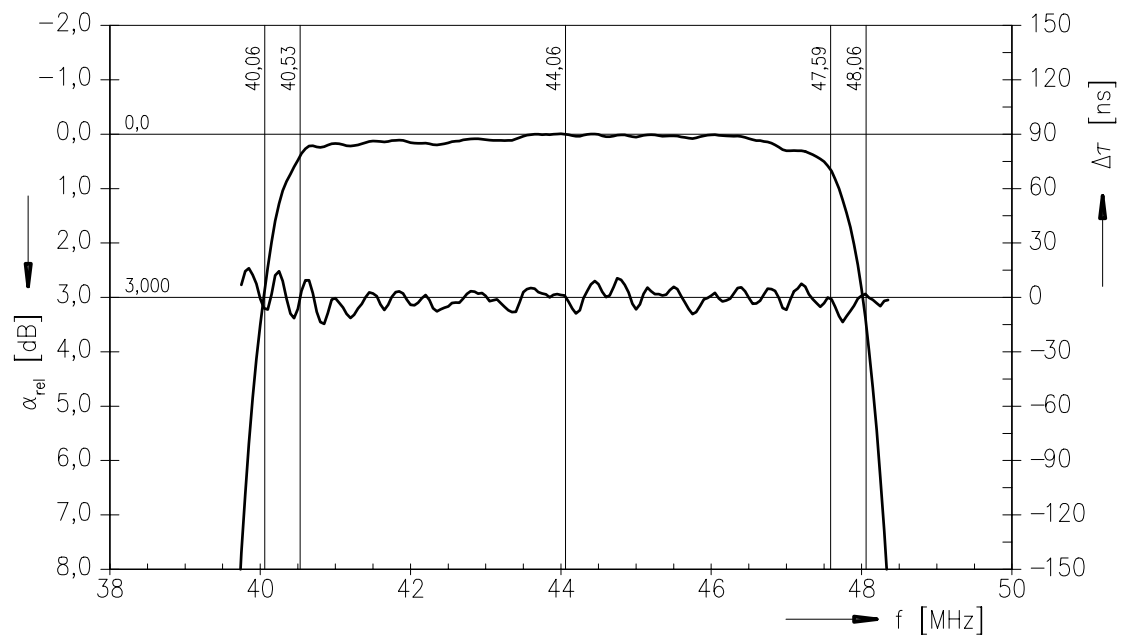
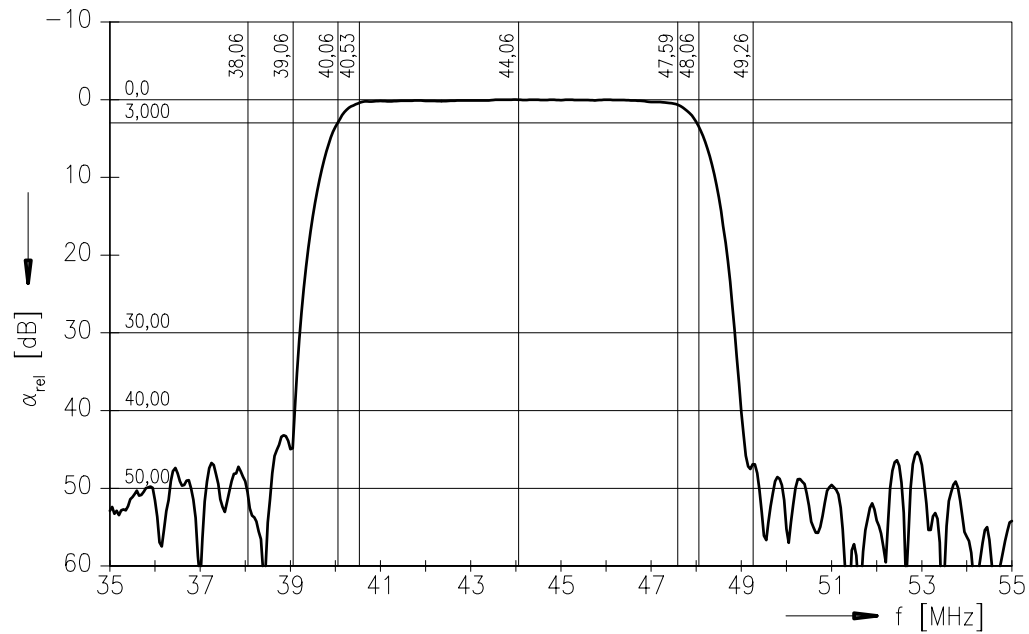
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Frequency response





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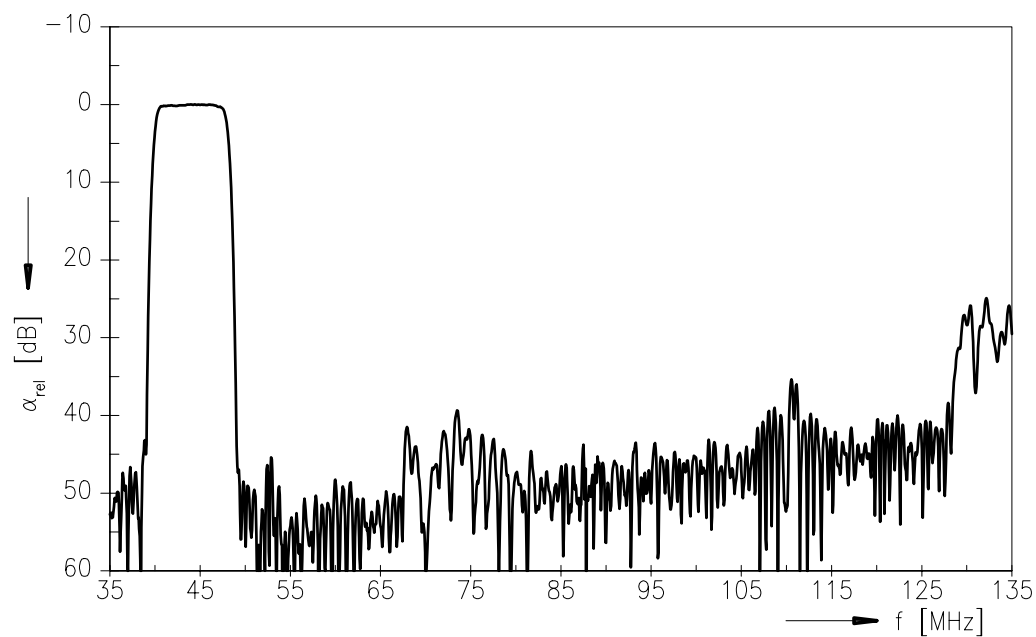
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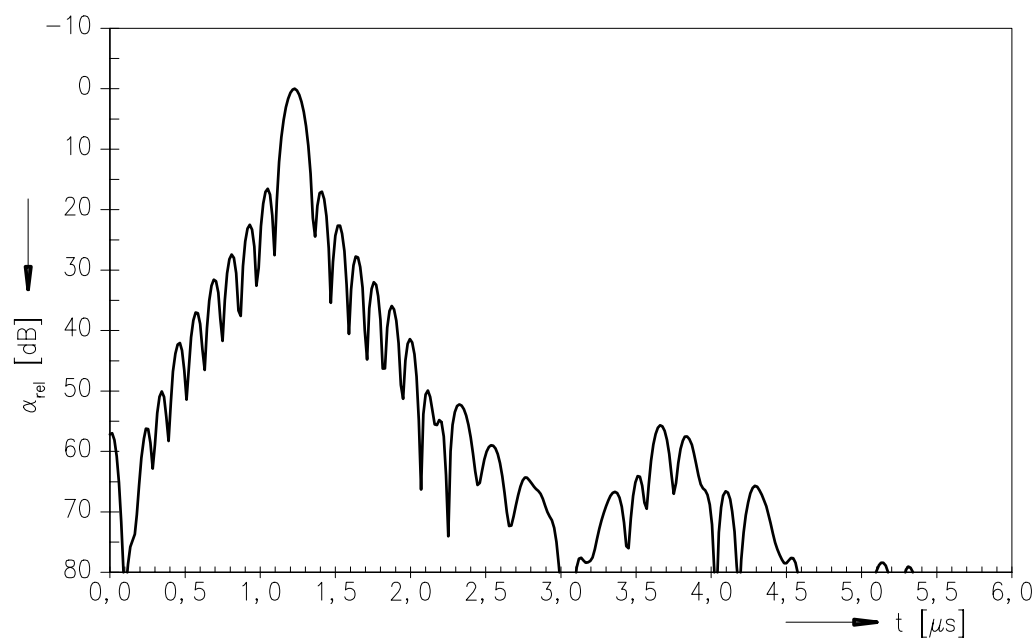
44,00 MHz

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Frequency response



Time domain response





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