



Series/Type: X6857D

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39360X6857N201		2011-01-14	2011-09-30	2012-09-30

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.



SAW Components

X 6857 D

Bandpass Filter

36,00 MHz

Data Sheet

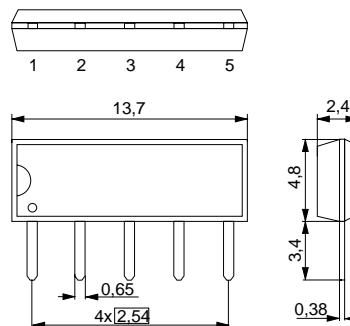
Duroplast package SIP5D

Features

- IF filter for digital TV
- Optimized for cascade of two devices
- Standard IC package

Terminals

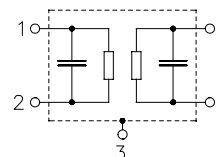
- Tinned CuFe alloy



Dimensions in mm, approx. weight 0,5 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 6857 D	B39360-X6857-N201	C61157-A1-A21	F61074-V8049-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: $T_A = 25 \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$
 Terminating load impedance: $Z_L = 2 \text{ k}\Omega \parallel 3 \text{ pF}$

		min.	typ.	max.	
Insertion attenuation	α				
Reference level for the following data	36,00 MHz	19,0	20,5	22,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	32,35 ... 39,65 MHz	—	0,7	—	dB
Pass bandwidth					
$\alpha_{\text{rel}} \leq 1,5 \text{ dB}$	$B_{1,5\text{dB}}$	—	7,8	—	MHz
$\alpha_{\text{rel}} \leq 3 \text{ dB}$	$B_{3\text{dB}}$	—	8,1	—	MHz
$\alpha_{\text{rel}} \leq 15 \text{ dB}$	$B_{15\text{dB}}$	—	8,9	—	MHz
$\alpha_{\text{rel}} \leq 30 \text{ dB}$	$B_{30\text{dB}}$	—	9,4	—	MHz
Relative attenuation	α_{rel}				
	31,65 MHz	7,0	10,0	—	dB
	40,35 MHz	7,0	10,0	—	dB
	31,30 MHz	22,0	29,0	—	dB
	40,70 MHz	22,0	29,0	—	dB
Lower sidelobe	25,00 ... 31,00 MHz	36,0	40,0		
Upper sidelobe	41,00 ... 45,00 MHz	36,0	41,0		
Reflected wave signal suppression					
1,0 μs ... 6,0 μs after main pulse (test pulse 250 ns, carrier frequency 36,00 MHz)		42,0	52,0	—	dB
Feedthrough signal suppression					
1,3 μs ... 1,2 μs before main pulse (test pulse 250 ns, carrier frequency 36,00 MHz)		—	50,0	—	dB
Group delay ripple (p-p)	$\Delta\tau$				
	32,35 ... 39,65 MHz	—	50	—	ns
Impedance at 36,00 MHz					
Input: $Z_{\text{IN}} = R_{\text{IN}} \parallel C_{\text{IN}}$		—	2,8 \parallel 15,5	—	k Ω \parallel pF
Output: $Z_{\text{OUT}} = R_{\text{OUT}} \parallel C_{\text{OUT}}$		—	2,4 \parallel 4,4	—	k Ω \parallel pF
Temperature coefficient of frequency	TC_f	—	-72	—	ppm/K



SAW Components

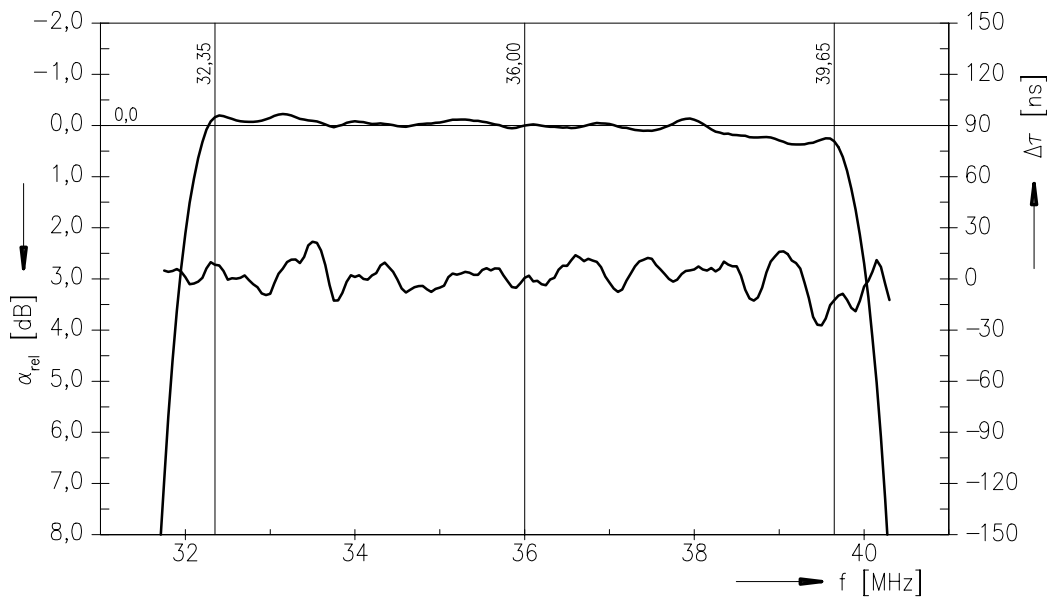
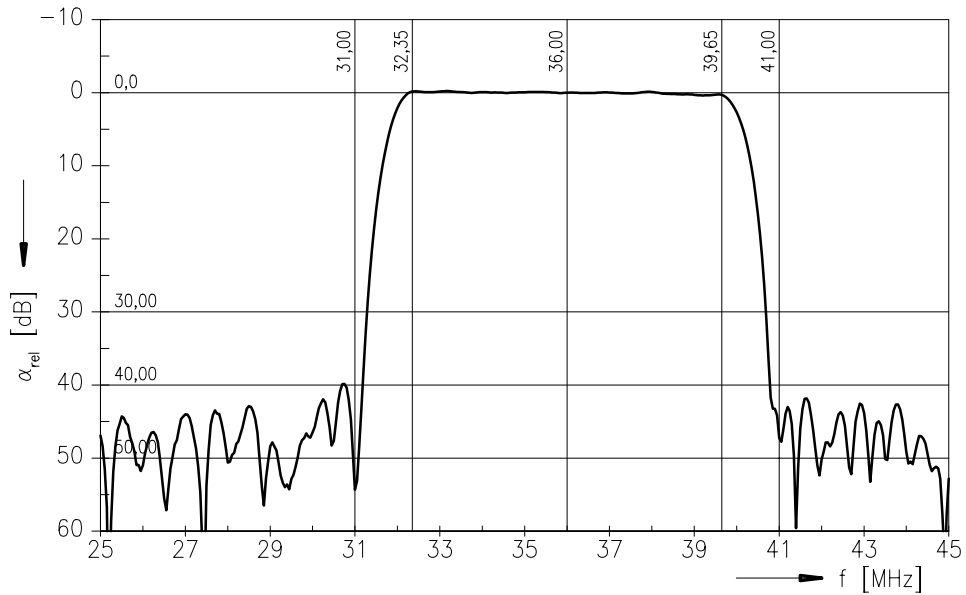
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Data Sheet

Frequency response





SAW Components

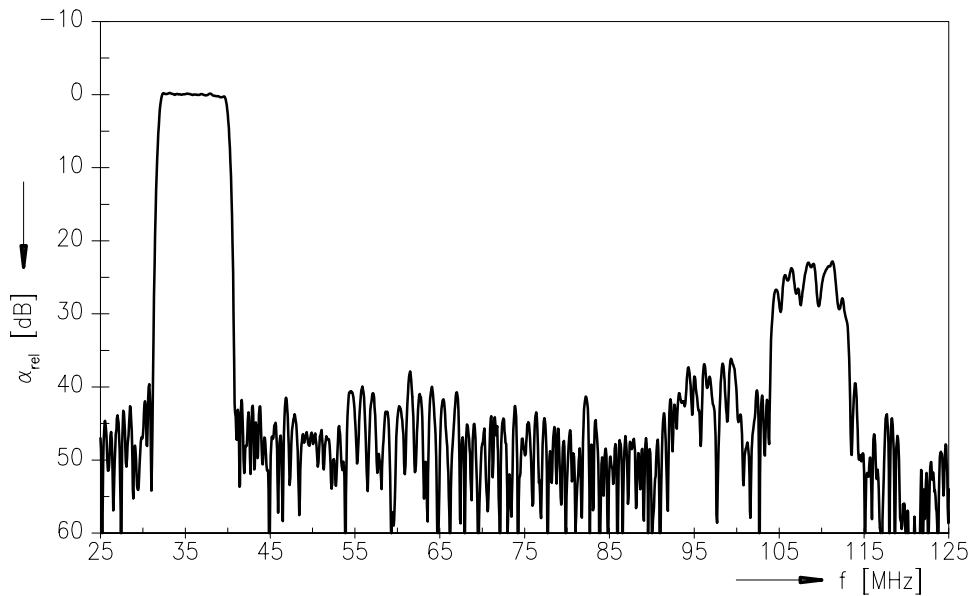
X 6857 D

Bandpass Filter

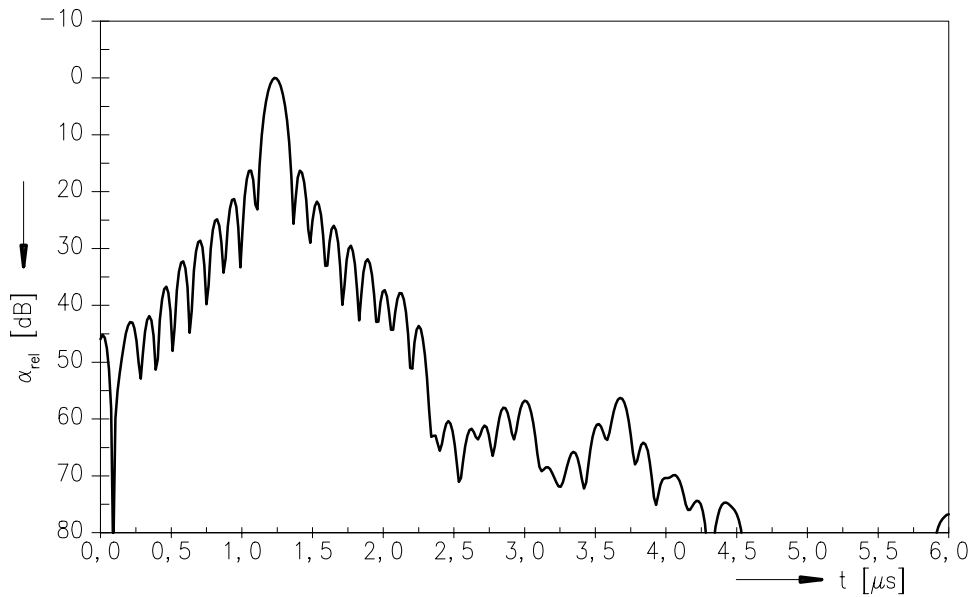
36,00 MHz

Data Sheet

Frequency response



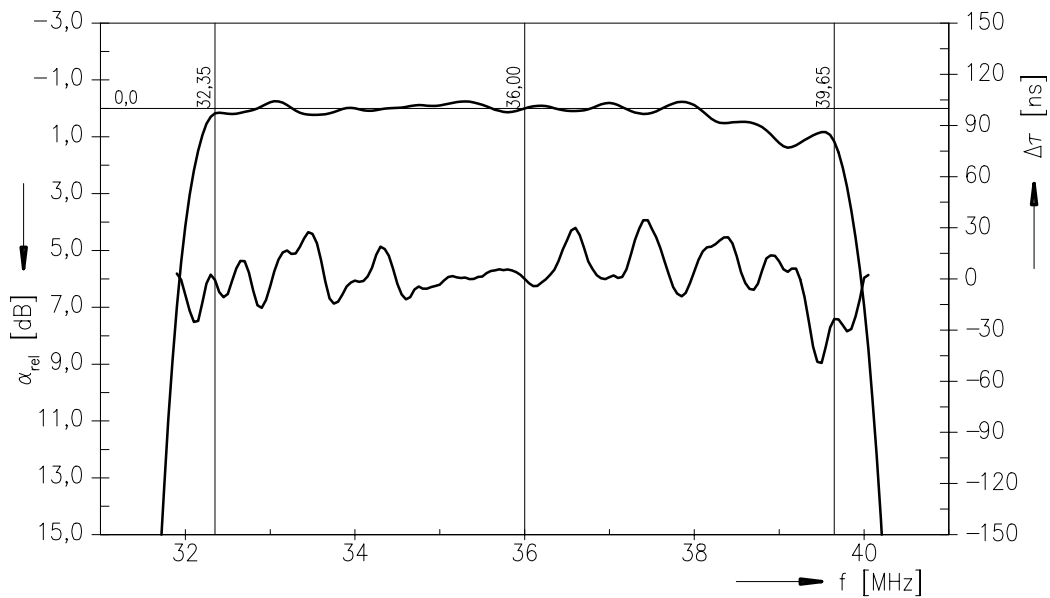
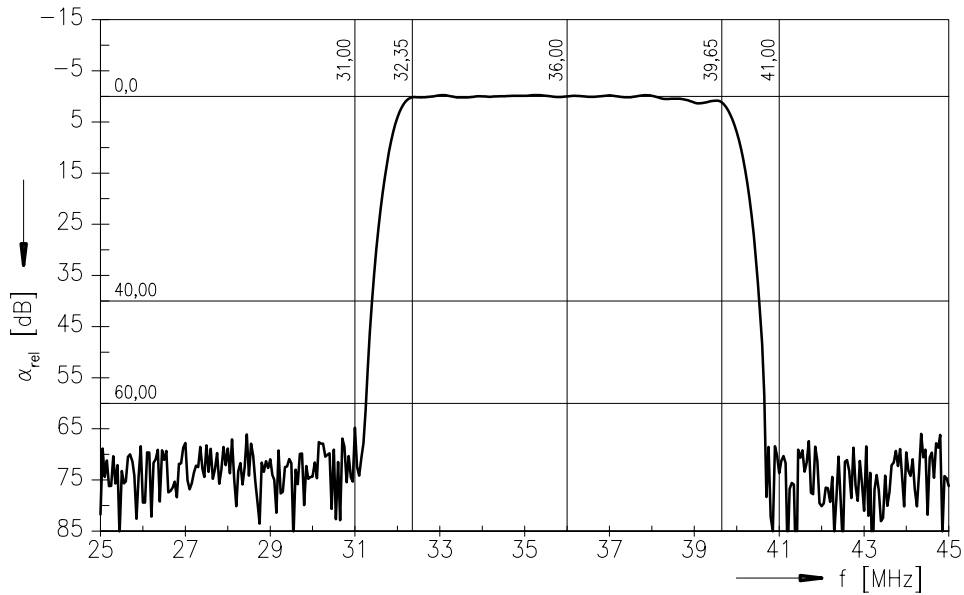
Time domain response





Data Sheet

Frequency response of two cascaded devices





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