EPCOS

SAW Components

Data Sheet B 619

Data Sheet

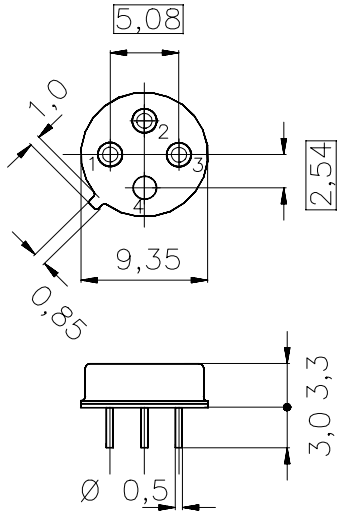
Metal package **TO 39**

Features

- Two-channel satellite receiver filter
- IF filter for DSB receivers
- Constant group delay

Terminals

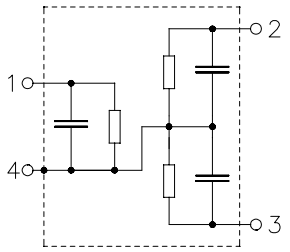
- Gold-plated NiFeCo alloy



Dimensions in mm, approx. weight 1,0 g

Pin configuration

1	Input	(Output)
2	Output 2	(Input 2)
3	Output 1	(Input 1)
4	Ground	



Type	Ordering code	Marking and Package according to	Packing according to
B 619	B39481-B 619-B210	C61157-A7-A29	F61064-V8011-Z000

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

Operable temperature range	T_A	–25/+85	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	0	V	between any terminals
AC voltages	V_{pp}	5	V	between any terminals

Data Sheet

Characteristics of channel 1

Reference temperature: T_A = 25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω
Group delay aperture 0,25MHz

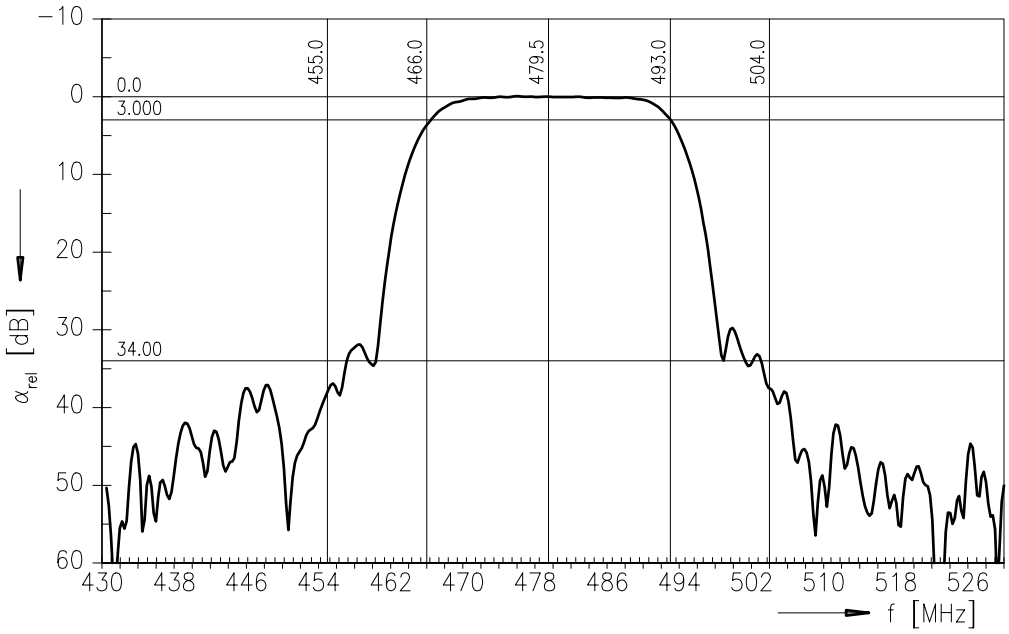
			min.	typ.	max.	
Insertion attenuation	479,50 MHz	α	—	22,1	24,5	dB
Reference level for the following data						
Center frequency		f_c	478,50	479,50	480,50	MHz
Pass bandwidth						
	$\alpha_{rel} \leq$ 3 dB	B_{3dB}	—	27,0	—	MHz
Relative attenuation		α_{rel}				
	466,00 MHz		—	3,2	5,0	dB
	493,00 MHz		—	3,5	5,0	dB
Lower sidelobe	430,00 … 455,00 MHz		34,0	39,0	—	dB
Upper sidelobe	504,00 … 530,00 MHz		34,0	39,0	—	dB
Reflected wave signal suppression						
0,135 µs … 2,0 µs after main pulse			40,0	45,0	—	dB
Amplitude ripple (p–p)		$\Delta\alpha$				
	471,00 ... 488,00 MHz		—	0,3	0,5	dB
Group delay ripple (p–p)		$\Delta\tau$				
	466,00 ... 493,00 MHz		—	10	18	ns
Impedance at 479,50 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	200 ∥ 3,6	—	Ω ∥ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	240 ∥ 3,9	—	Ω ∥ pF
Temperature coefficient of frequency		TC_f	—	– 86	—	ppm/K

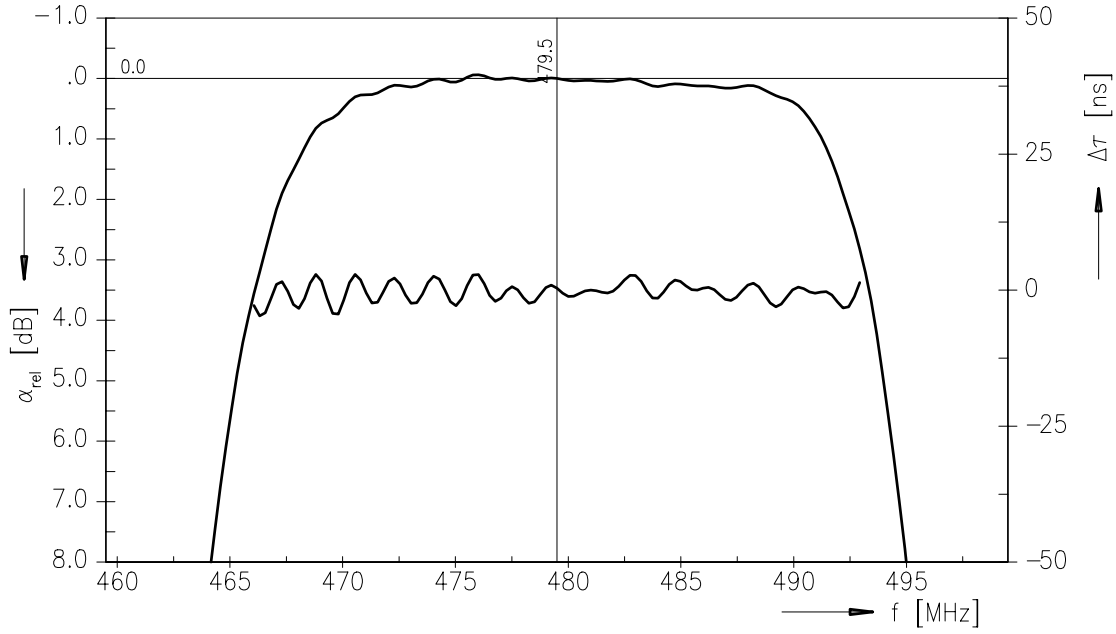
Characteristics of channel 2

Reference temperature: T_A = 25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω
Group delay aperture 0,25MHz

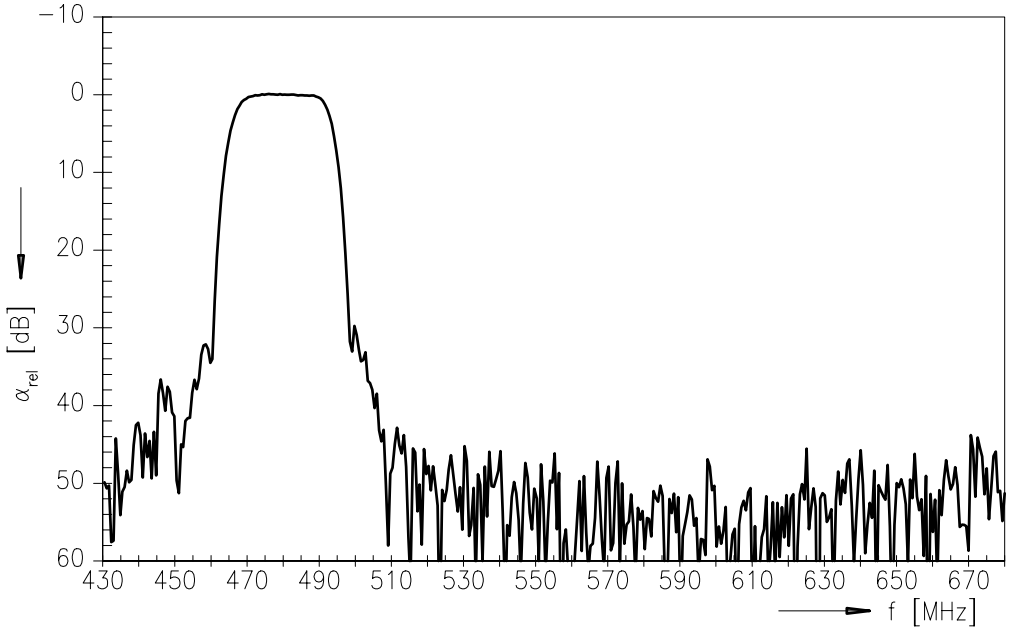
			min.	typ.	max.	
Insertion attenuation	479,50 MHz	α	—	22,7	23,6	dB
Reference level for the following data						
Center frequency		f_c	478,50	479,50	480,50	MHz
Pass bandwidth						
	$\alpha_{rel} \leq$ 3 dB	B_{3dB}	—	36,0	—	MHz
Relative attenuation		α_{rel}				
	461,50 MHz		—	3,5	4,8	dB
	497,50 MHz		—	2,3	4,8	dB
Lower sidelobe	430,00 … 449,00 MHz		34,0	39,0	—	dB
Upper sidelobe	510,00 … 530,00 MHz		30,0	36,0	—	dB
Reflected wave signal suppression						
0,13 µs … 2,0 µs after main pulse			40,0	45,0	—	dB
Amplitude ripple (p–p)		$\Delta\alpha$				
	468,50 ... 490,50 MHz		—	0,3	0,5	dB
Group delay ripple (p–p)		$\Delta\tau$				
	461,50 ... 497,50 MHz		—	12	18	ns
Impedance at 479,50 MHz						
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	360‖2,5	—	Ω ‖ pF
Temperature coefficient of frequency		TC_f	—	– 86	—	ppm/K

Frequency response

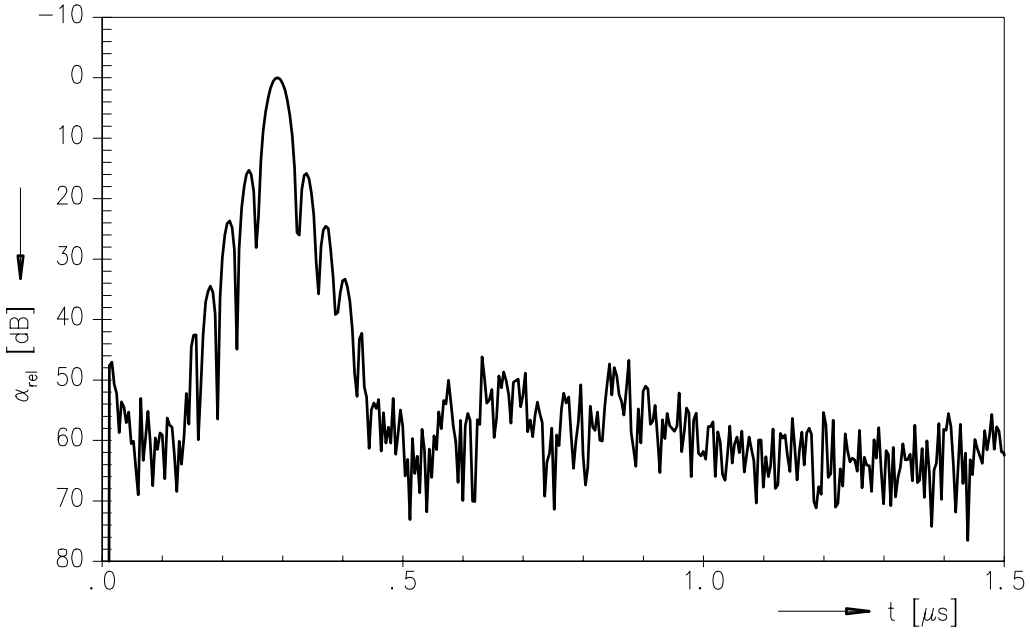




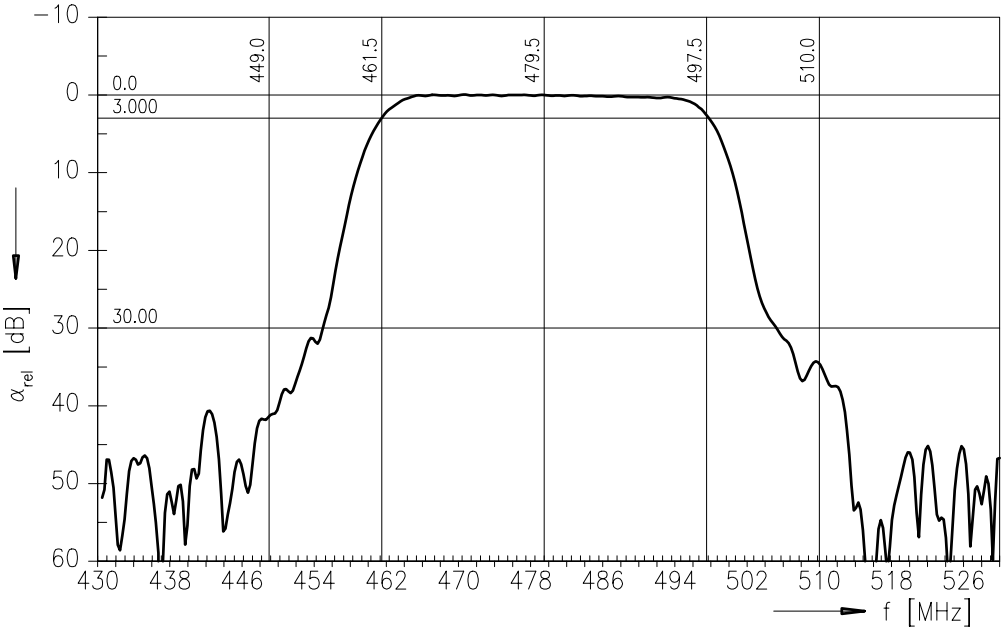
Frequency response

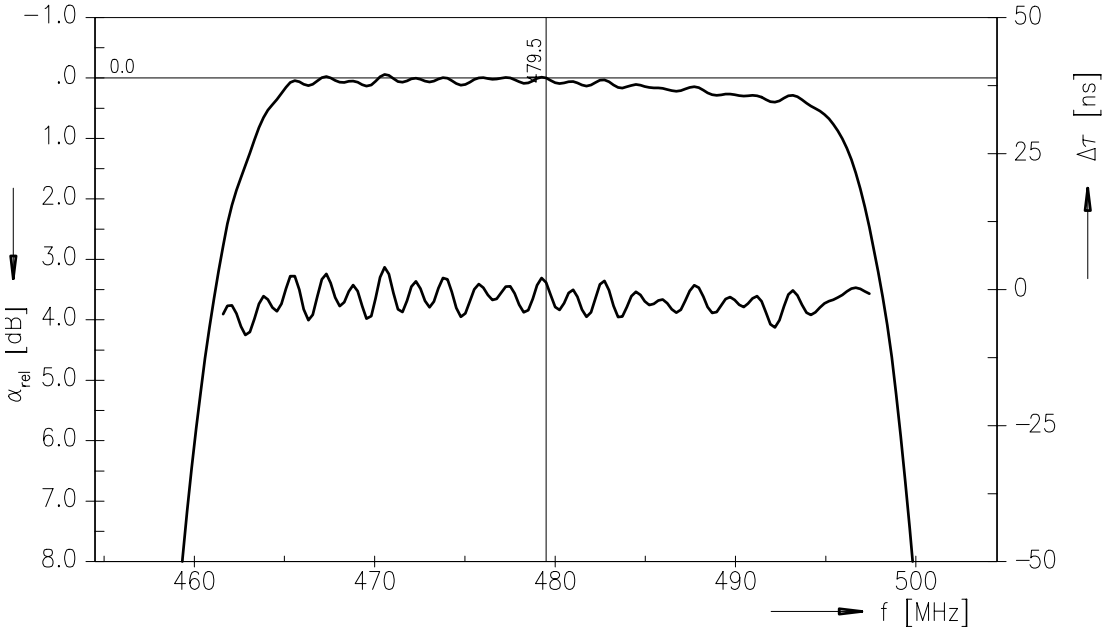


Time domain response

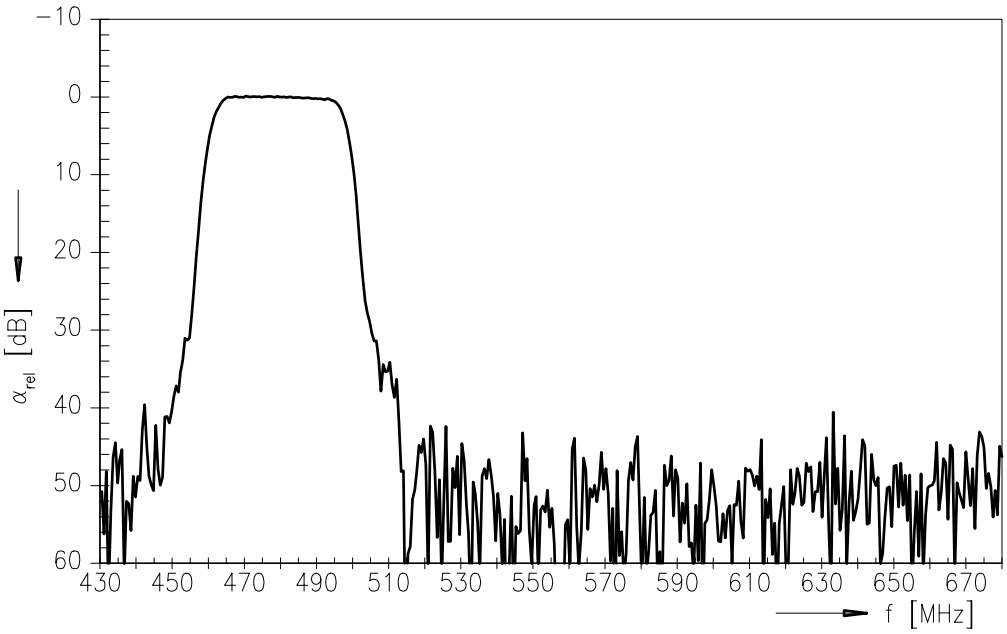


Frequency response

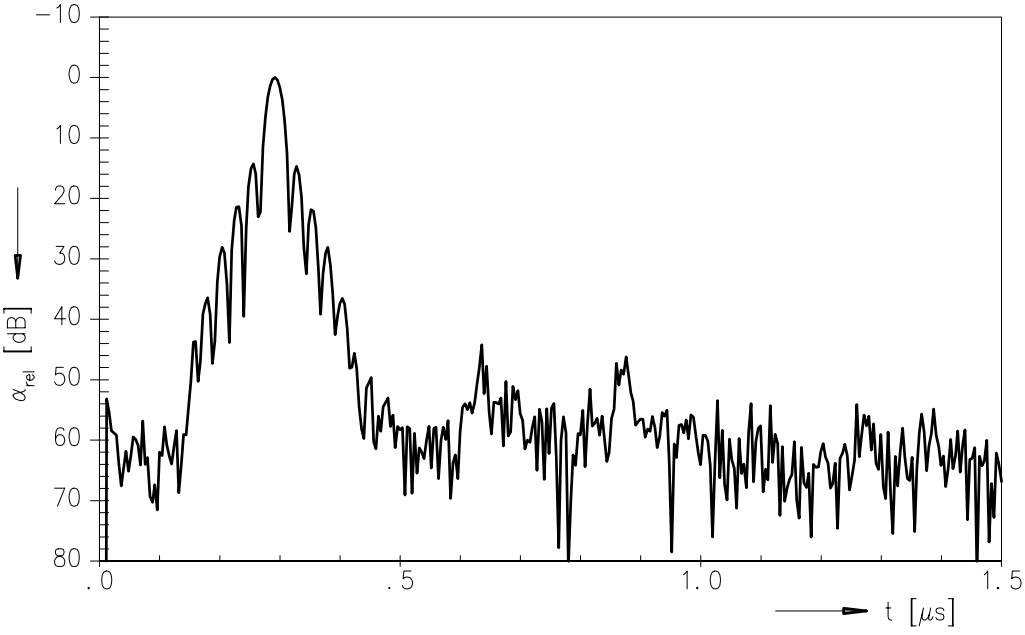




Frequency response



Time domain response



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