EPCOS

SAW Components

Data Sheet B 611

Data Sheet

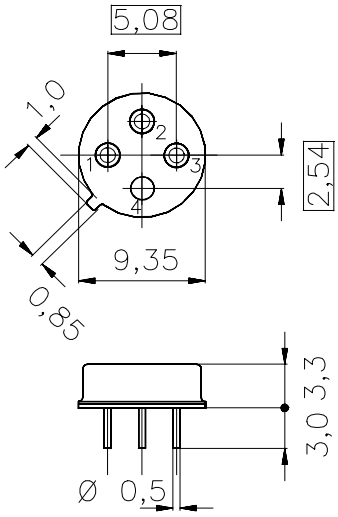
Metal package **TO 39**

Features

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

Terminals

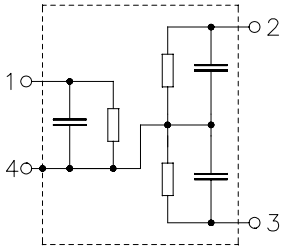
- Gold-plated NiFeCo alloy



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 611	B39481-B 611-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 0,25 MHz

			min.	typ.	max.	
Insertion attenuation	479,50 MHz	α	—	21,0	22,5	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		—	3,3	4,5	dB
	493,00 MHz		—	2,5	4,5	dB
Lower sidelobe	430,00 … 452,00 MHz		36,0	45,0	—	dB
Upper sidelobe	507,00 … 530,00 MHz		34,0	44,0	—	dB
Reflected wave signal suppression						
0,13 µs … 2,0 µs after main pulse			40,0	49,0	—	dB
Amplitude ripple (p–p)		$\Delta\alpha$				
	471,00 ... 488,00 MHz		—	0,3	0,6	dB
Group delay ripple (p–p)		$\Delta\tau$				
	466,00 ... 493,00 MHz		—	11	18	ns
Impedance at 479,50 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	170 ‖ 3,6	—	Ω ‖ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	180 ‖ 3,8	—	Ω ‖ pF
Temperature coefficient of frequency		TC_f	—	– 86	—	ppm/K

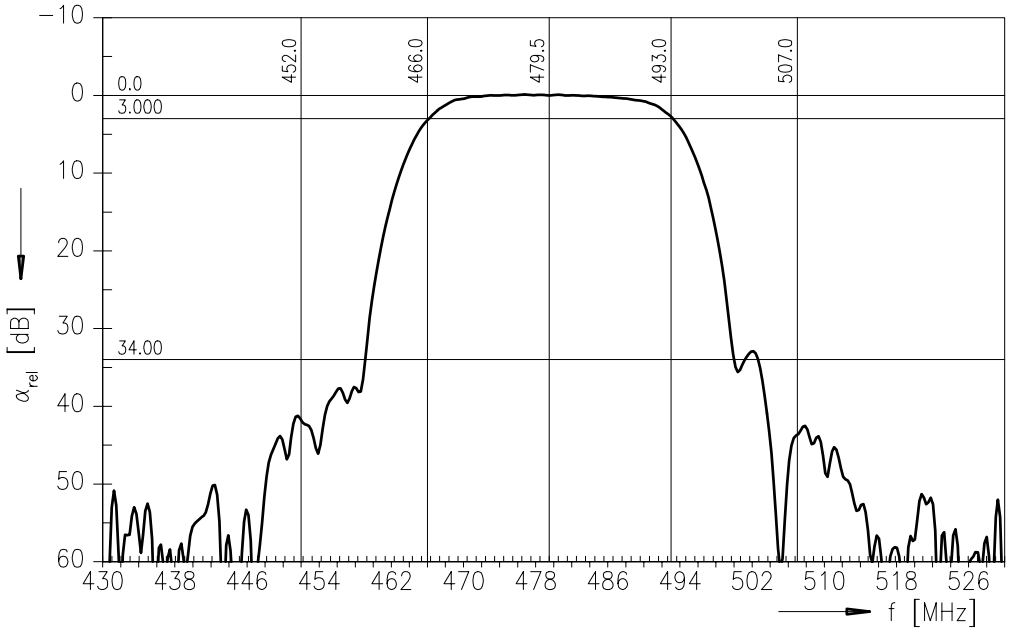
Data Sheet

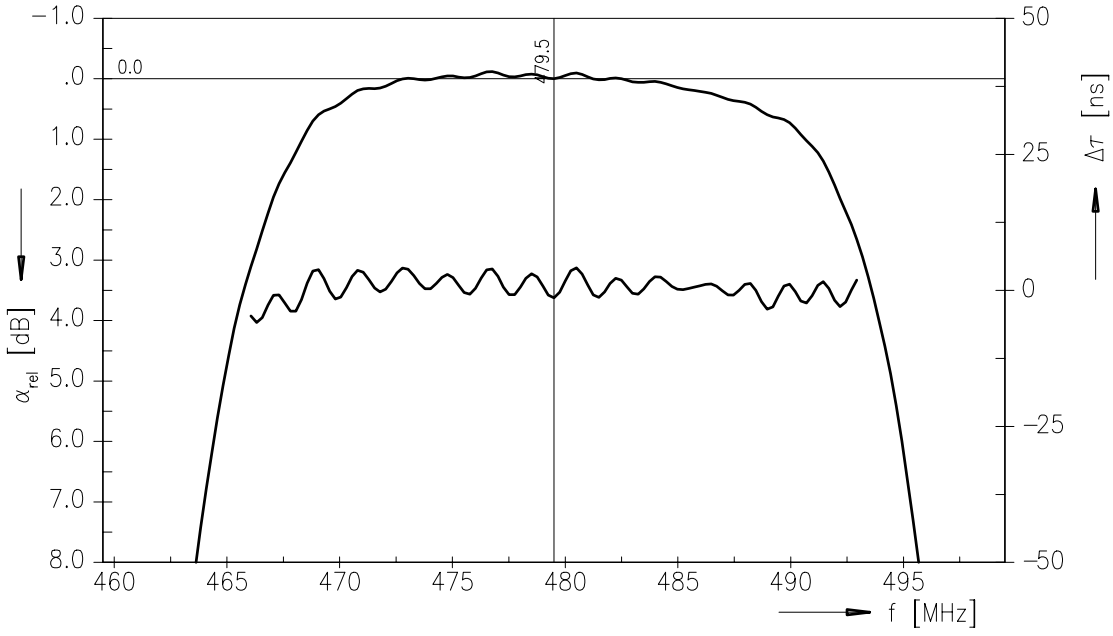
Characteristics of channel 2

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

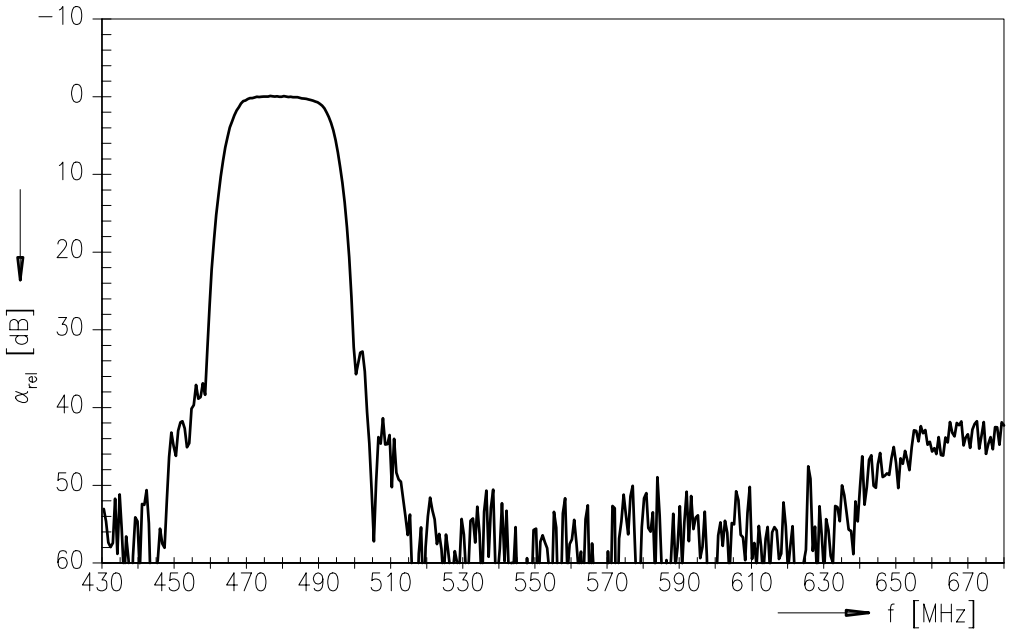
			min.	typ.	max.	
Insertion attenuation	479,50 MHz	α	—	20,4	22,1	dB
Reference level for the following data						
Center frequency		f_c	478,50	479,50	480,50	MHz
Pass bandwidth						
	$\alpha_{rel} \leq$ 3 dB	B_{3dB}	—	18,0	—	MHz
Relative attenuation		α_{rel}				
	470,50 MHz		—	3,5	4,5	dB
	488,50 MHz		—	2,3	4,5	dB
Lower sidelobe	430,00 … 457,50 MHz		36,0	44,0	—	dB
Upper sidelobe	500,50 … 530,00 MHz		34,0	42,0	—	dB
Reflected wave signal suppression						
0,13 µs … 3,0 µs after main pulse			40,0	44,0	—	dB
Amplitude ripple (p–p)		$\Delta\alpha$				
	476,00 ... 483,00 MHz		—	0,4	0,6	dB
Group delay ripple (p–p)		$\Delta\tau$				
	470,50 ... 488,50 MHz		—	11	18	ns
Impedance at 479,50 MHz						
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	130‖3,3	—	Ω ‖ pF
Temperature coefficient of frequency		TC_f	—	– 86	—	ppm/K

Frequency response

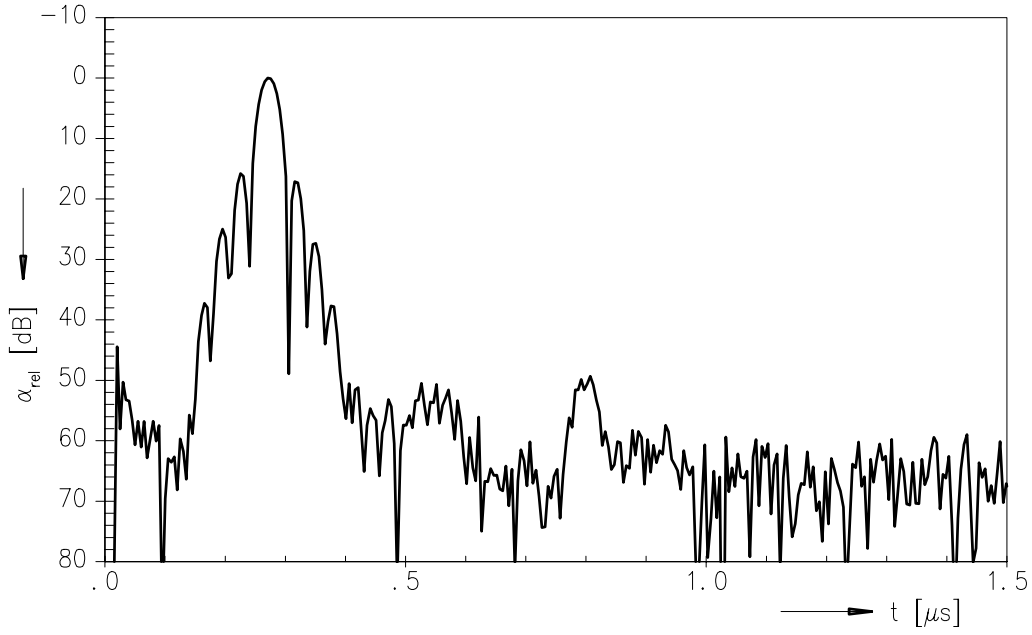




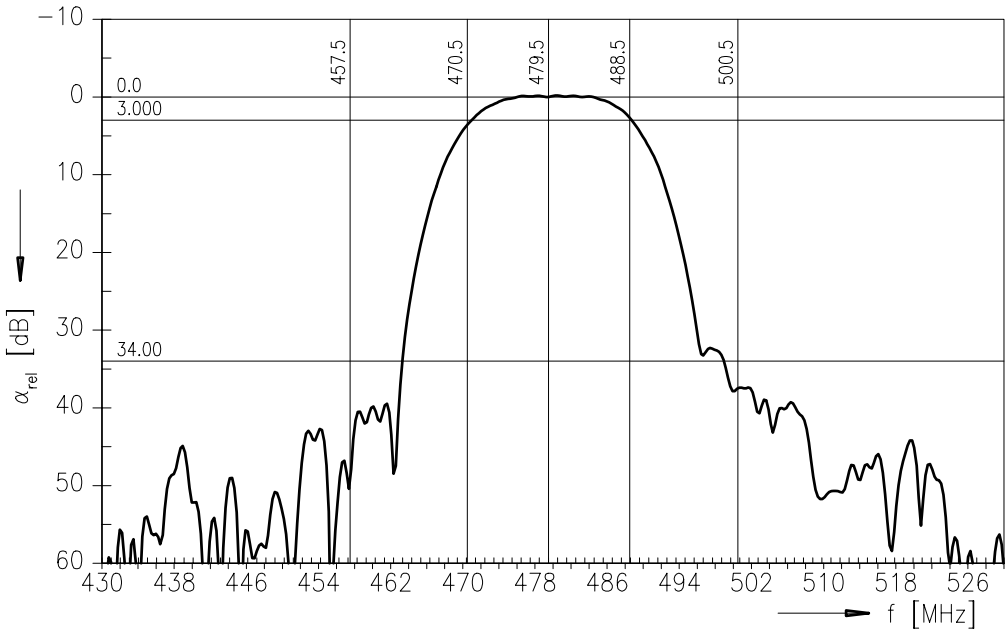
Frequency response

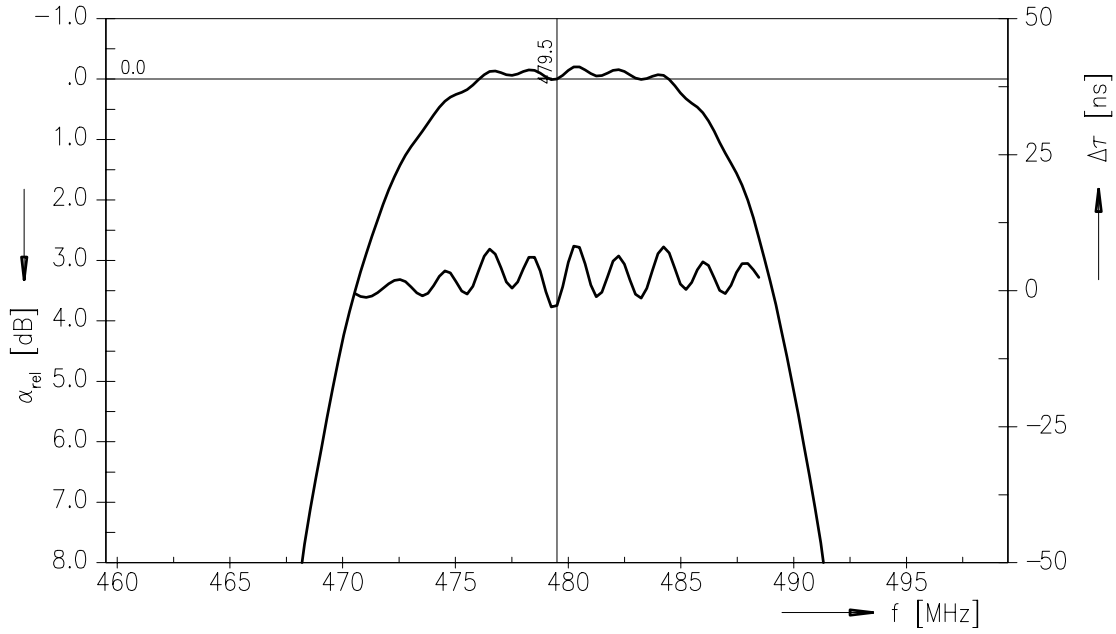


Time domain response

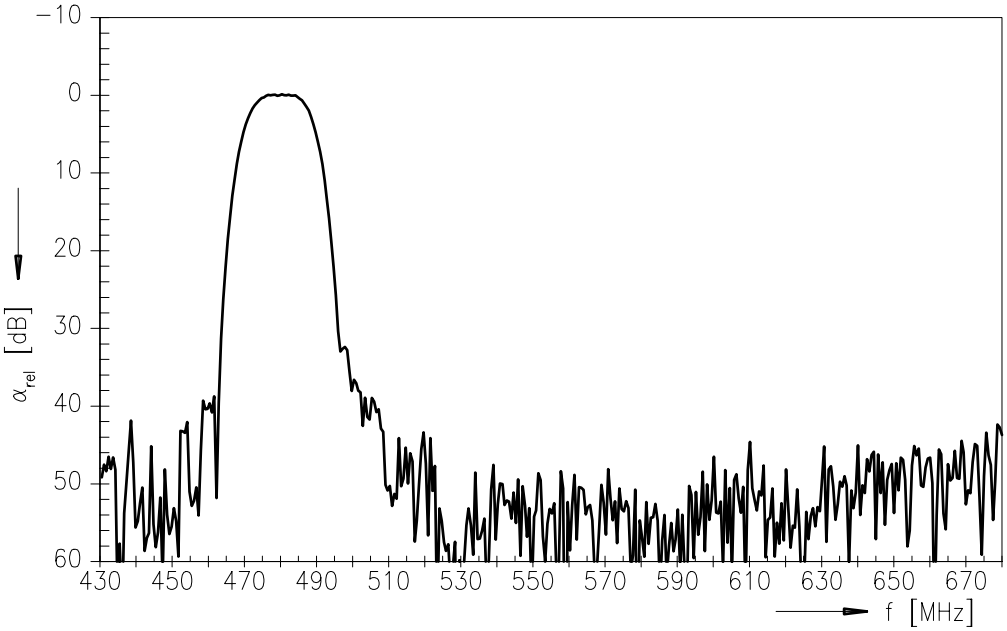


Frequency response

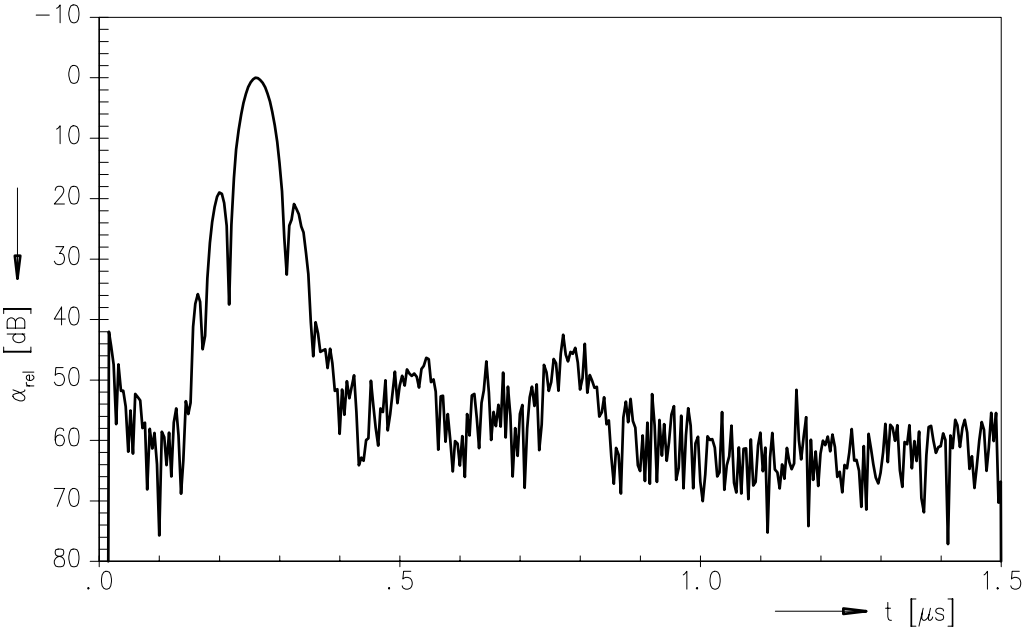




Frequency response



Time domain response



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