EPCOS

SAW Components

Data Sheet B 801

EPCOS

Data Sheet

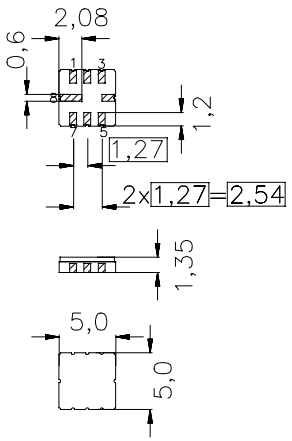
Ceramic package **QCC8C**

Features

- Two-channel satellite receiver filter
- IF filter for DSB receivers
- Constant group delay
- Ceramic package for **S**urface **M**ounted **T**echnology **(SMT)**

Terminals

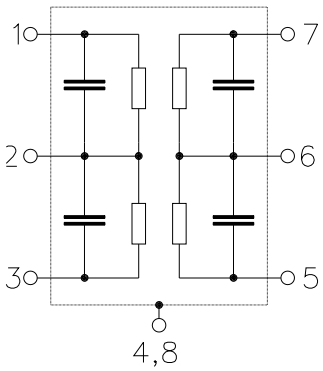
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

Pin configuration

1	Input channel 2
2	Input ground
3	Input channel 1
5	Output ground channel 2
6	Output
7	Ground, output ground channel 1
4,8	Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B 801	B39481-B801-U310	C61157-A7-A56	F61074-V8169-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

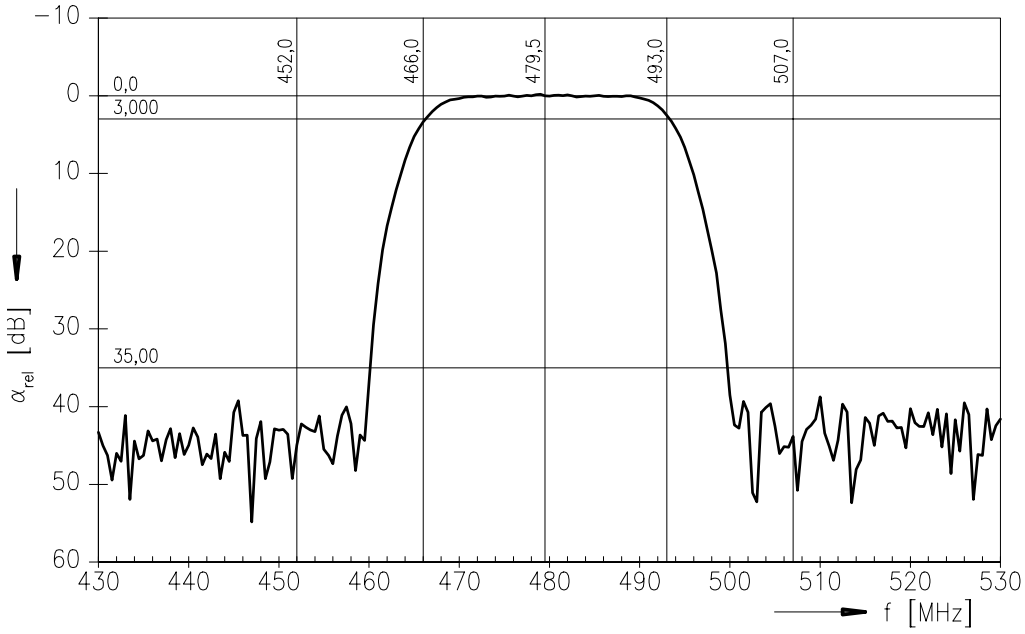
			min.	typ.	max.	
Insertion attenuation	479,50 MHz	α	—	22,3	25	dB
Reference level for the following data						
Center frequency		f_c	478,50	479,50	480,50	MHz
Pass bandwidth						
	$\alpha_{rel} \leq$ 3 dB	B_{3dB}	—	27,0	—	MHz
Relative attenuation		α_{rel}				
	466,00 MHz		—	2,8	4,5	dB
	493,00 MHz		—	3,0	4,5	dB
Lower sidelobe	430,00 … 452,00 MHz		36,0	41,0	—	dB
Upper sidelobe	507,00 … 530,00 MHz		34,0	39,0	—	dB
Reflected wave signal suppression						
0,14 µs … 2,0 µs after main pulse			40,0	49,0	—	dB
Amplitude ripple (p–p)		Δα				
	471,00 ... 488,00 MHz		—	0,3	0,6	dB
Group delay ripple (p–p)		Δτ				
	466,00 ... 493,00 MHz		—	11	18	ns
Impedance at 479,50 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	0,67‖3,2	—	kΩ ‖ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	0,06‖5,6	—	kΩ ‖ pF
Temperature coefficient of frequency		TC_f	—	– 86	—	ppm/K

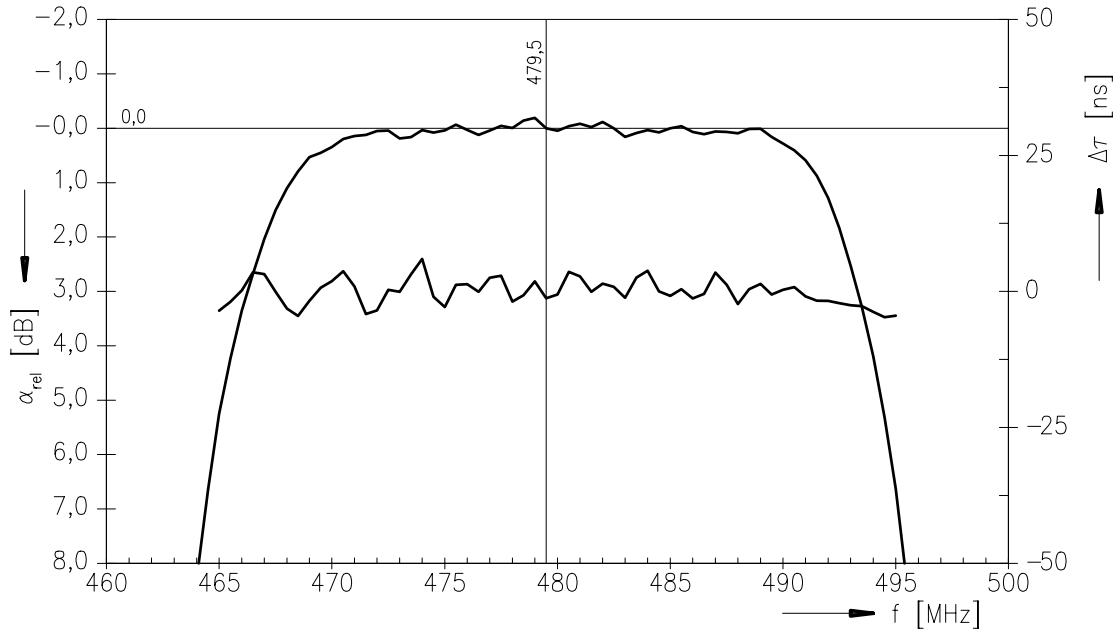
Characteristics of channel 2

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

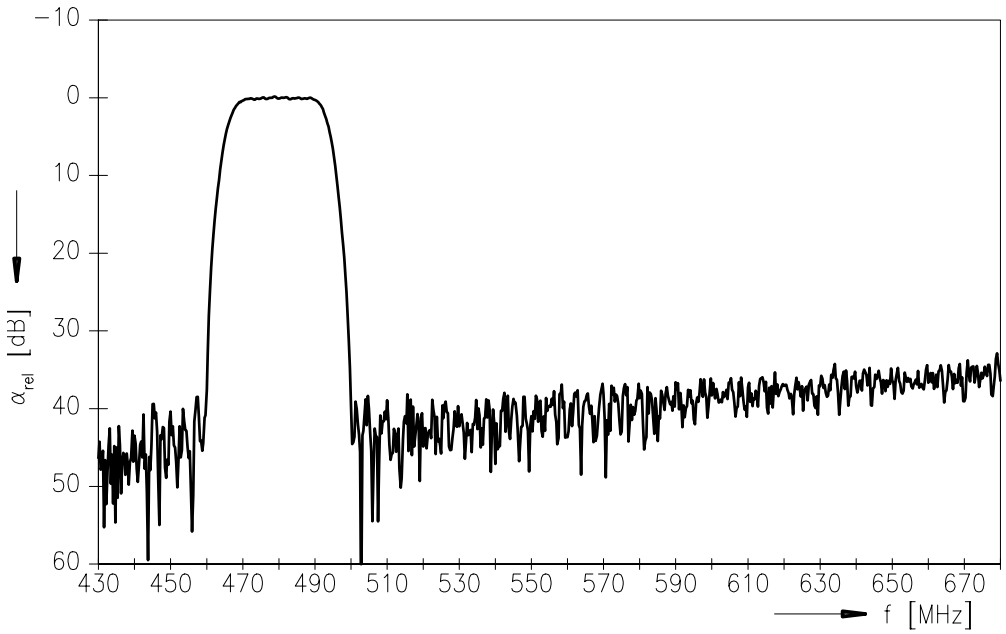
			min.	typ.	max.	
Insertion attenuation	479,50 MHz	α	—	22,3	25	dB
Reference level for the following data						
Center frequency		f_c	478,50	479,50	480,50	MHz
Pass bandwidth						
	$\alpha_{rel} \leq$ 3 dB	B_{3dB}	—	18,0	—	MHz
Relative attenuation		α_{rel}				
	470,50 MHz		—	2,9	4,7	dB
	488,50 MHz		—	2,9	4,4	dB
Lower sidelobe	430,00 … 457,50 MHz		36,0	43,0	—	dB
Upper sidelobe	500,50 … 530,00 MHz		34,0	41,0	—	dB
Reflected wave signal suppression						
0,13 µs … 2,0 µs after main pulse			40,0	45,0	—	dB
Amplitude ripple (p–p)		$\Delta\alpha$				
	476,00 ... 483,00 MHz		—	0,2	0,6	dB
Group delay ripple (p–p)		$\Delta\tau$				
	470,50 ... 488,50 MHz		—	11	18	ns
Impedance at 479,50 MHz						
Input:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	0,59‖3,5	—	kΩ || pF
Output:	$Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	0,06‖5,6	—	kΩ || pF
Temperature coefficient of frequency		TC_f	—	– 86	—	ppm/K

Frequency response of channel 1

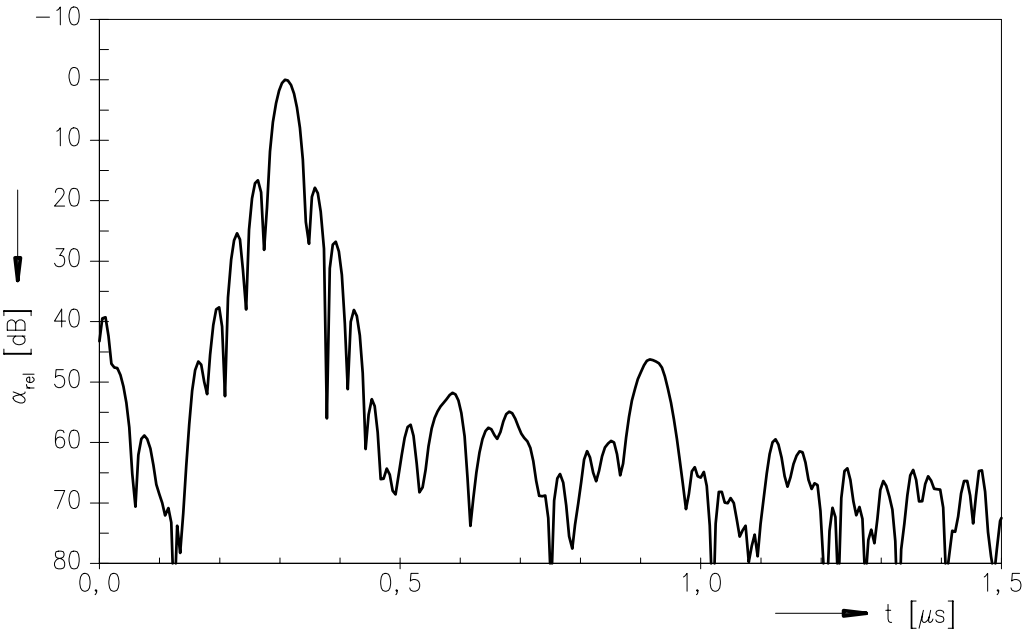




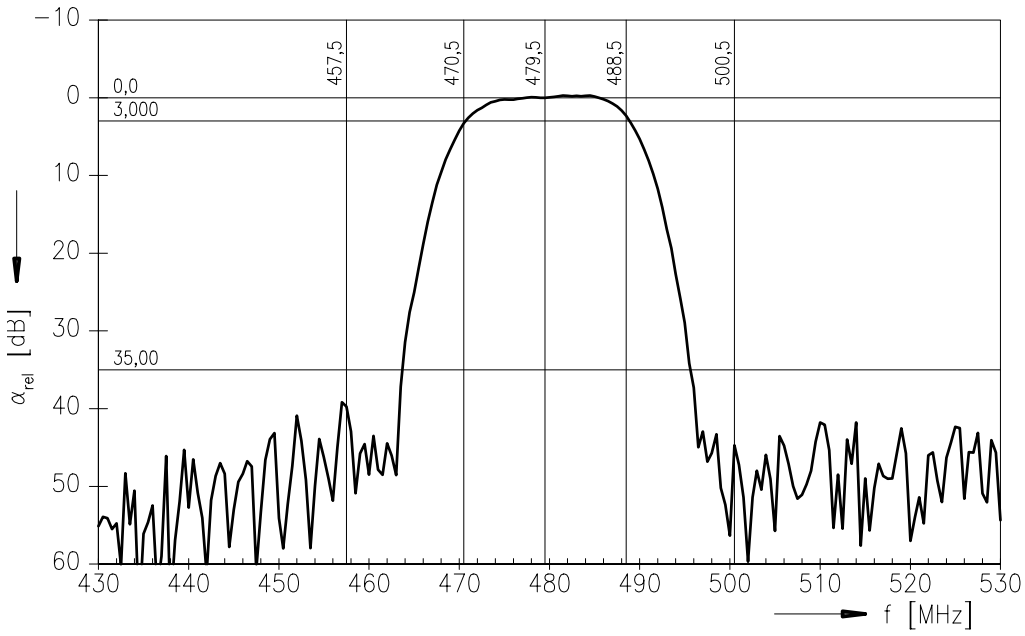
Frequency response of channel 1

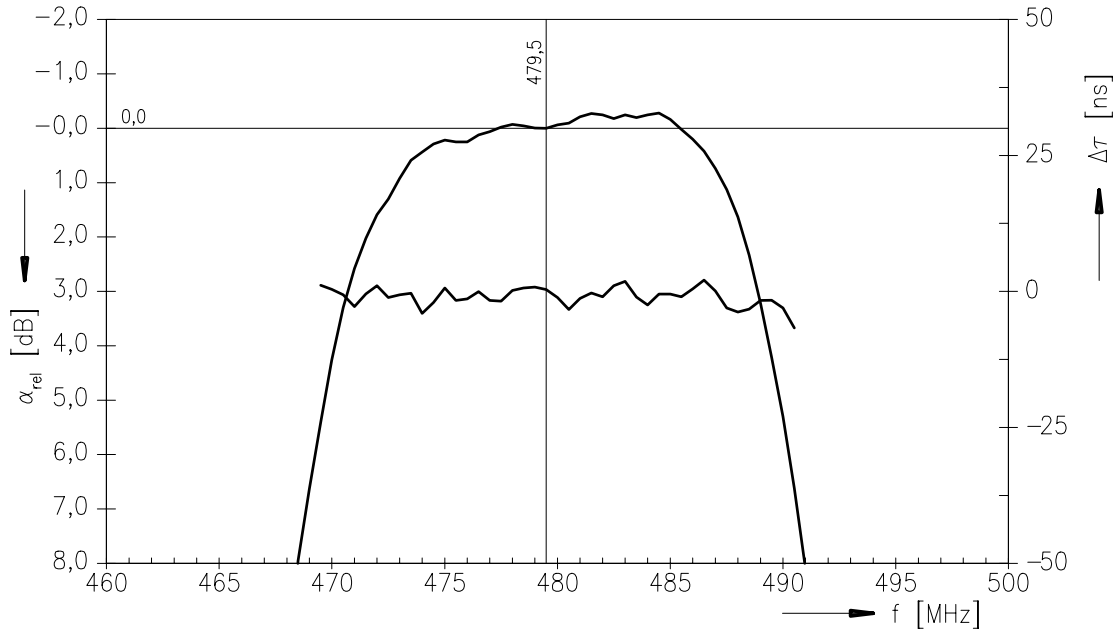


Time domain response of channel 1

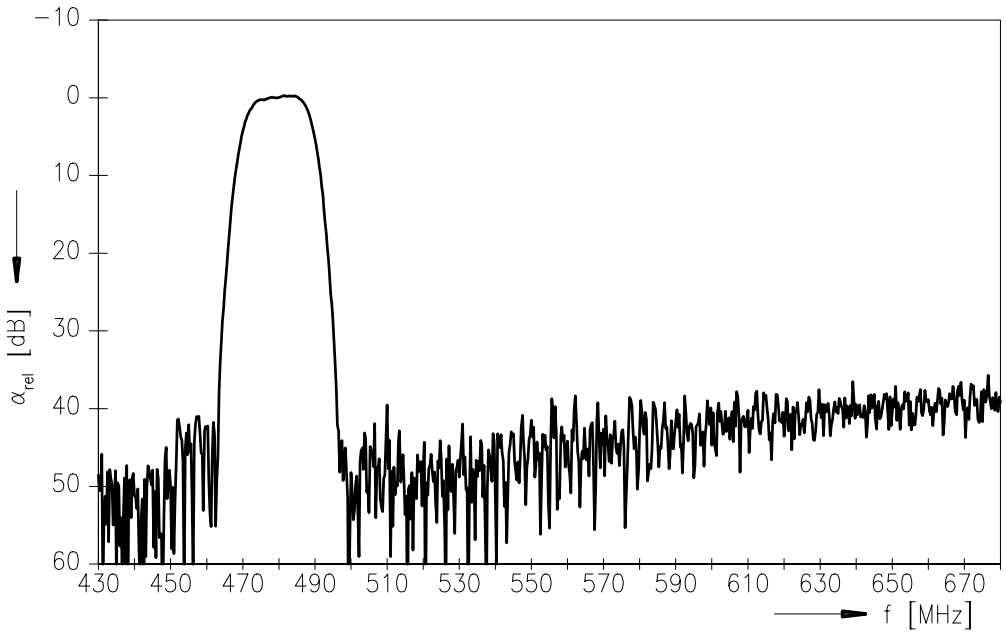


Frequency response of channel 2

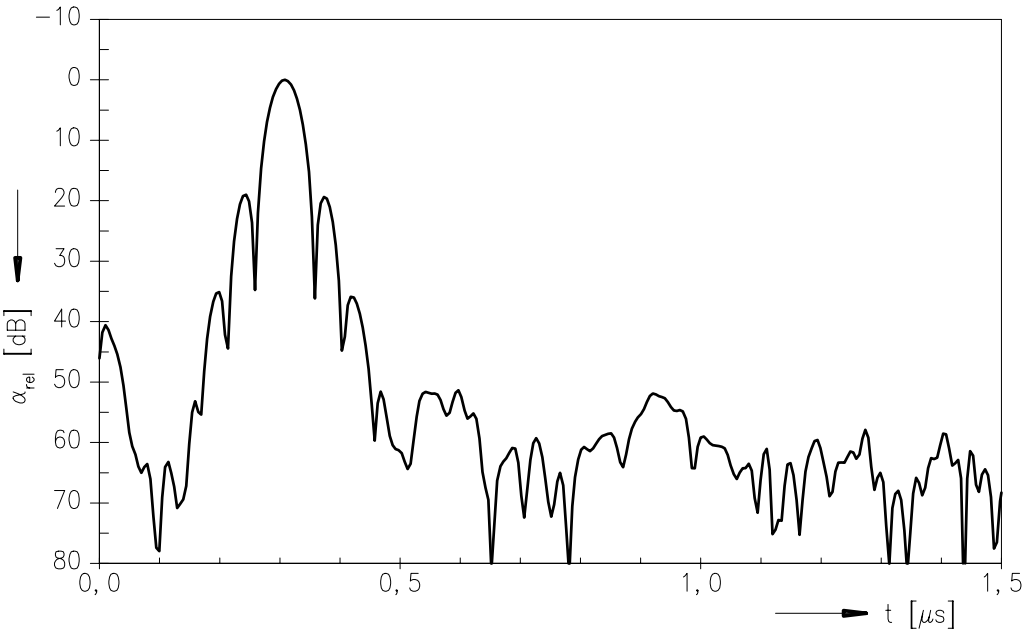




Frequency response of channel 2



Time domain response of channel 2



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