EPCOS

SAW Components

Data Sheet B 686

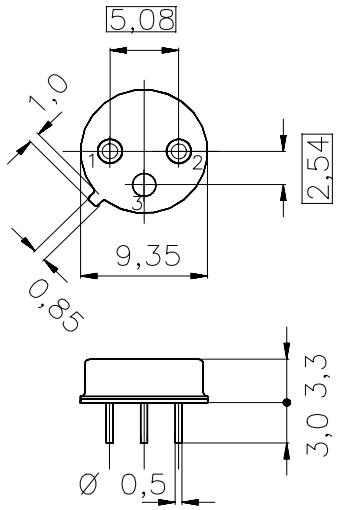
Metal package **TO 39**

Features

- IF filter for DSB receivers
- Constant group delay

Terminals

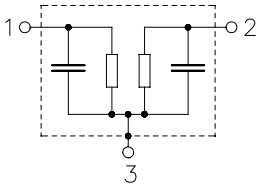
- Gold-plated NiFeCo alloy



Dimensions in mm, approx. weight 1,0 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B 686	B39481-B 686-B510	C61157-A7-A28	F61064-V8011-Z000

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

Maximum ratings

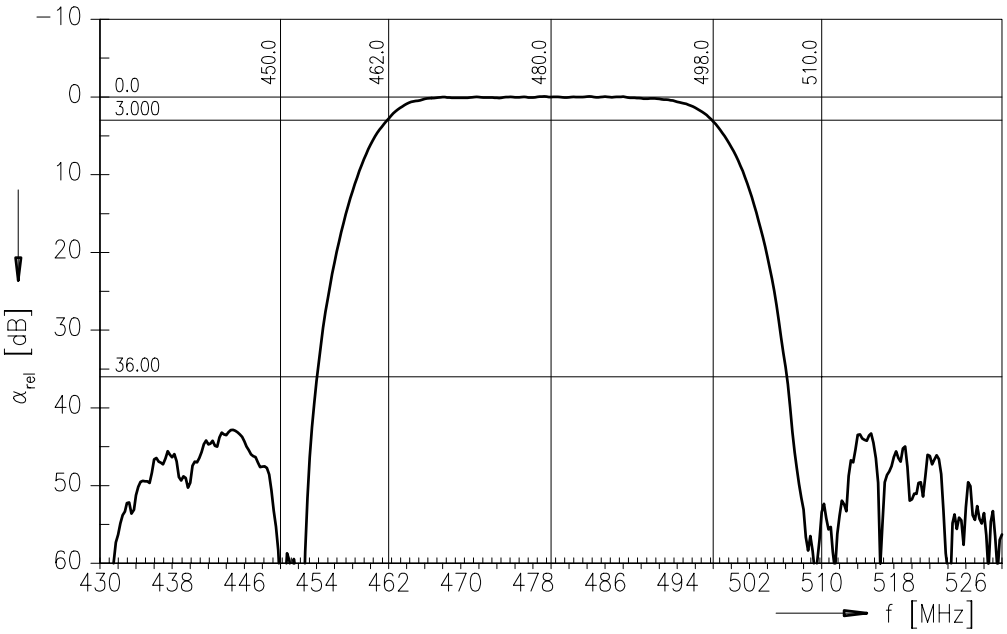
Operable temperature range	T_A	–25/+85	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	0	V	between any terminals
AC voltages	V_{pp}	5	V	between any terminals

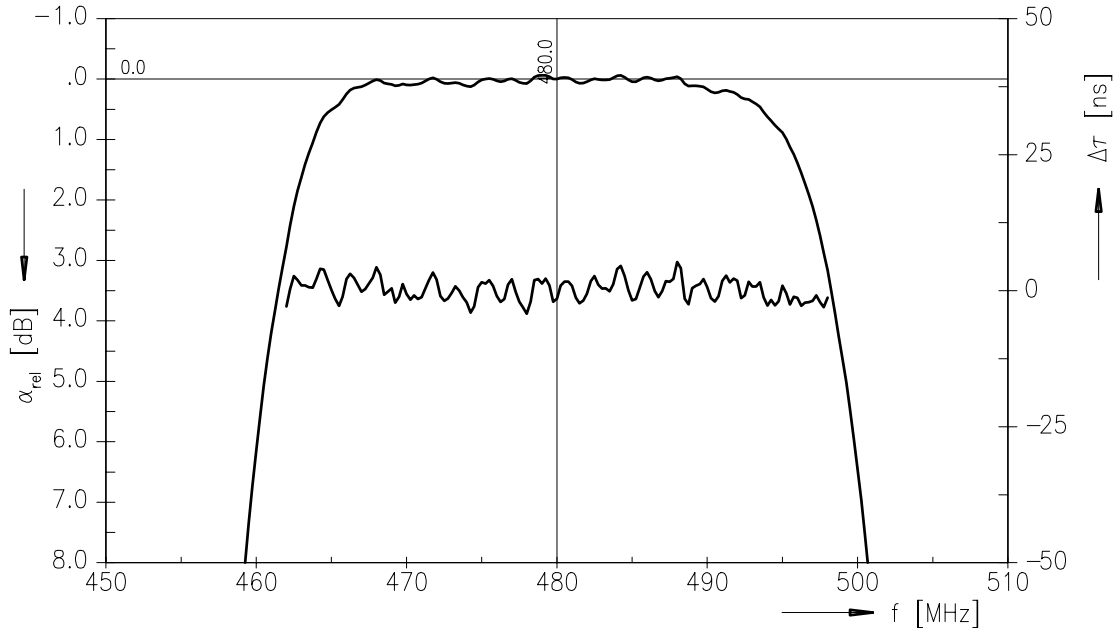
Characteristics

Reference temperature: T_A = 25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω
Group delay aperture 3,6 MHz

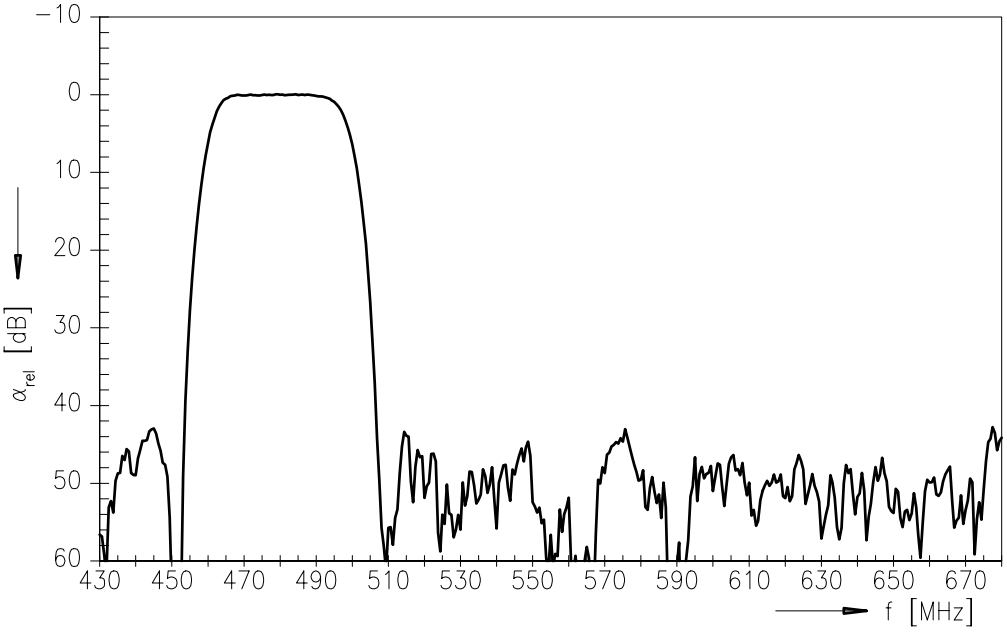
			min.	typ.	max.	
Insertion attenuation Reference level for the following data	480,00 MHz	α	—	21,0	22,5	dB
Center frequency		f_c	479,00	480,00	481,00	MHz
Pass bandwidth	$\alpha_{rel} \leq$ 3 dB	B_{3dB}	–	36,2	–	MHz
Relative attenuation		α_{rel}				
	462,00 MHz		—	3,0	4,2	dB
	498,00 MHz		—	2,9	4,2	dB
Lower sidelobe	430,00 ... 450,00 MHz		36,0	41,0	—	dB
Upper sidelobe	510,00 ... 530,00 MHz		36,0	42,0	—	dB
Reflected wave signal suppression 0,1µs … 2,0 µs after main pulse			40,0	48,0	—	dB
Amplitude ripple (p–p)		Δα				
	467,00 ... 493,00 MHz		—	0,3	0,5	dB
Amplitude tilt						
	467,00 ... 493,00 MHz		—	0,02	—	dB/MHz
Group delay	480,00 MHz	τ	—	274,0	—	ns
Group delay ripple (p–p)		Δτ				
	466,50 ... 493,50 MHz		—	1,4	3,0	ns
Impedance at 480,00 MHz						
Input: $Z_{IN} = R_{IN} \parallel C_{IN}$			—	60 ‖ 4,8	—	Ω ‖ pF
Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$			—	260‖3,1	—	Ω ‖ pF
Temperature coefficient of frequency		TC_f	—	– 86	—	ppm/K

Frequency response

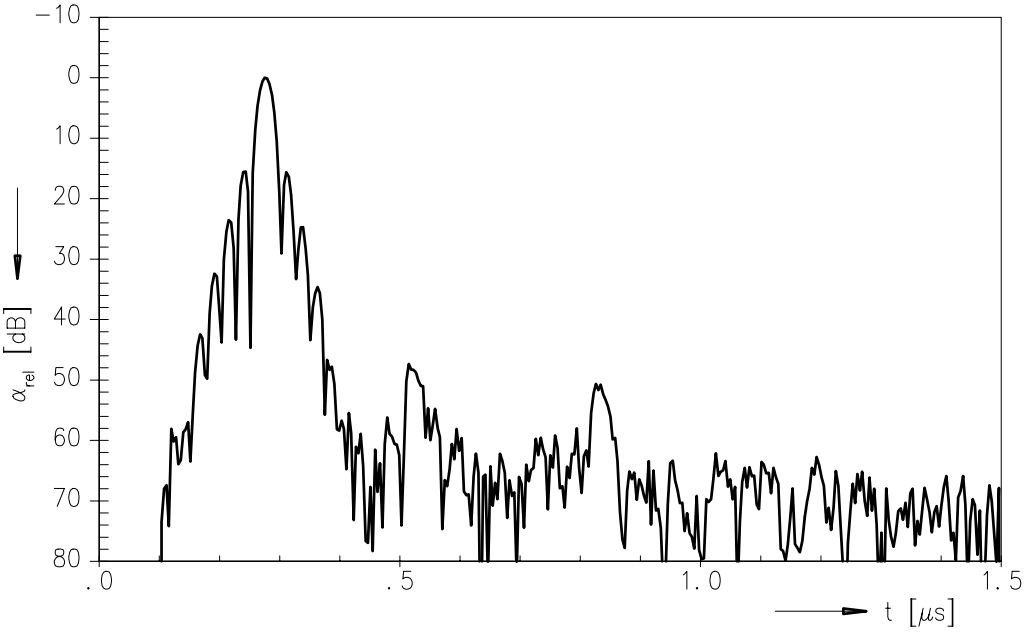




Frequency response



Time domain response



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