



SAW Components

Data Sheet B3686





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B3686

Low-Loss Filter

337,5 MHz

Data Sheet

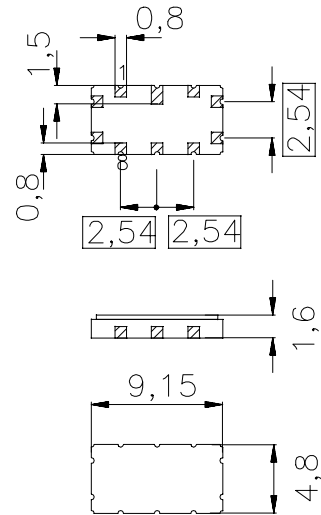
Features

- High performance IF bandpass filter
- 15 MHz usable bandwidth
- Constant group delay
- Ceramic SMD package

Terminals

- Gold plated

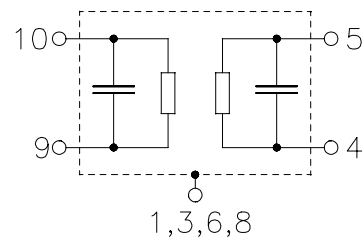
Ceramic package QCC10B



Dimensions in mm, approx. weight 0,2 g

Pin configuration

10	Input
9	Input ground
5	Output
4	Output ground
2, 7	Ground
1, 3, 6, 8	Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B3686	B39341-B3686-Z710	C61157-A7-A49	F61074-V8035-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	-40 / +85	°C	
Storage temperature range	T_{stg}	-40 / +85	°C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	



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Characteristics

Operating temperature range: $T = -25 \dots 85 \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$ and matching network
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 Group delay aperture: 100 kHz

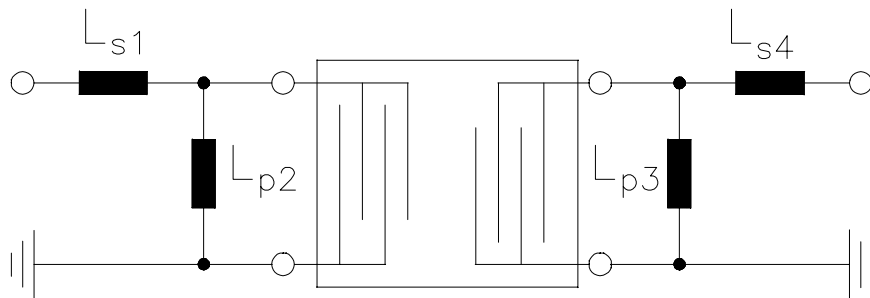
		min.	typ.	max.	
Nominal frequency	f_N	—	337,5	—	MHz
Minimum insertion attenuation	α_{\min}	—	8,7	10,0	dB
Amplitude ripple (p-p) 330,0 ... 345,0 MHz	$\Delta\alpha$	—	0,4	1,0	dB
Pass bandwidth $\alpha_{\text{rel}} \leq 1,0 \text{ dB}$	$B_{1,0\text{dB}}$	15	20	—	MHz
Relative attenuation (relative to α_{\min}) 10,0 ... 319,0 MHz	α_{rel}	35	40	—	dB
356,0 ... 550,0 MHz		35	40	—	dB
550,0 ... 1000,0 MHz		27	50	—	dB
Group delay ripple (p-p) 330,0 ... 345,0 MHz	$\Delta\tau$	—	35	70	ns
1 dB compression 330,0 ... 345,0 MHz		12	—	—	dBm
Input IP3 330,0 ... 345,0 MHz		30	—	—	dBm
Temperature coefficient of frequency	TC_f	—	- 87	—	ppm/K



Data Sheet

Matching network to 50 Ω

(Element values depend upon PCB layout)



$$L_{s1} = 33 \text{ nH}$$

$$L_{p2} = 47 \text{ nH}$$

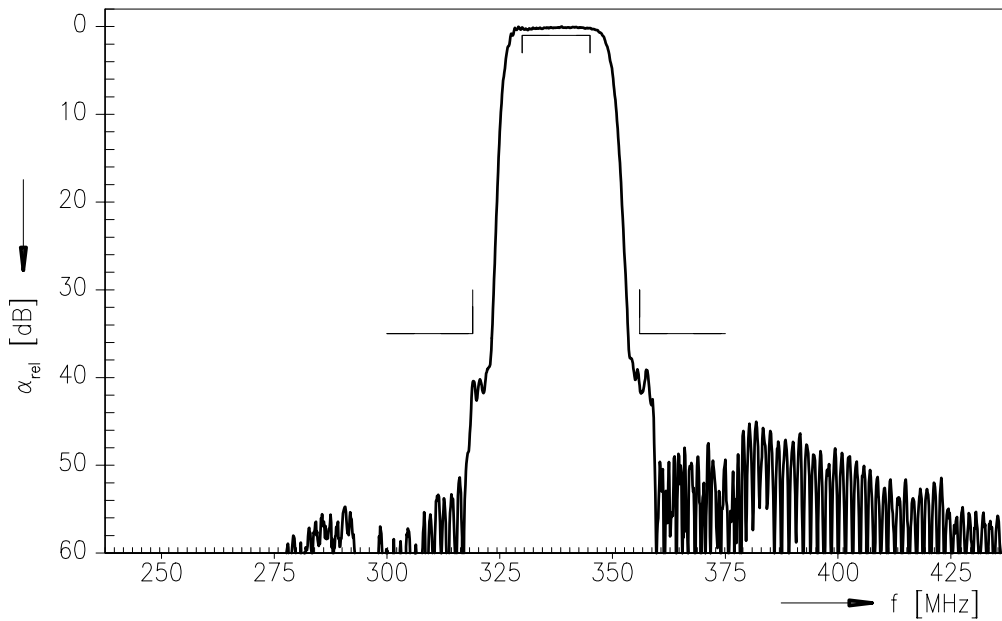
$$L_{p3} = 47 \text{ nH}$$

$$L_{s4} = 47 \text{ nH}$$

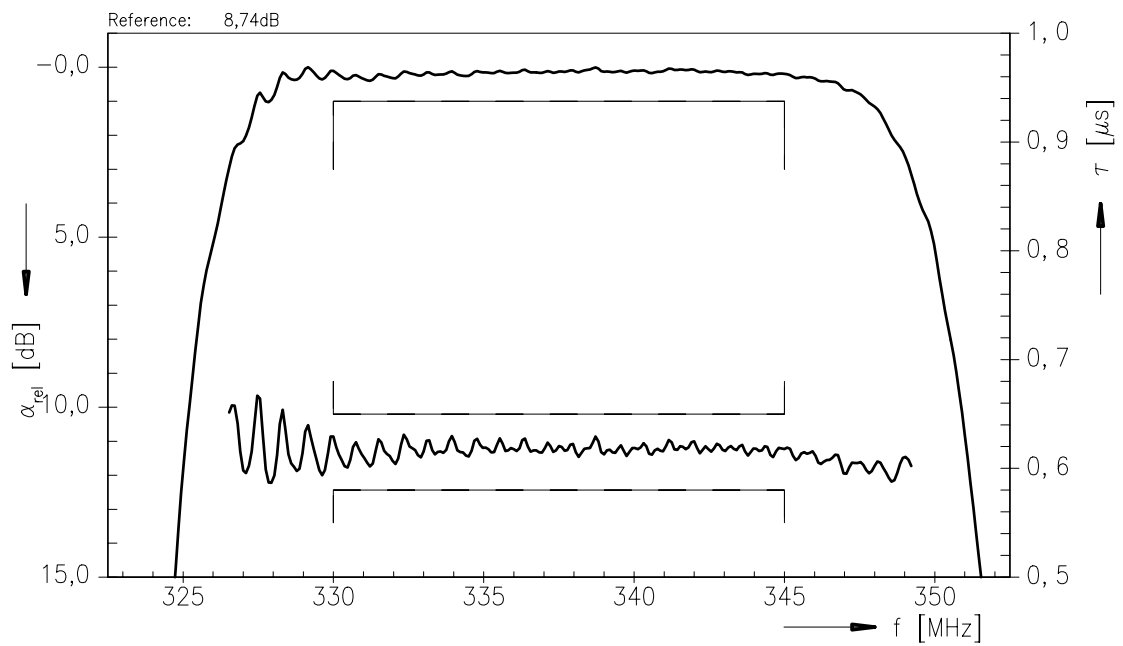


Data Sheet

Normalized frequency response



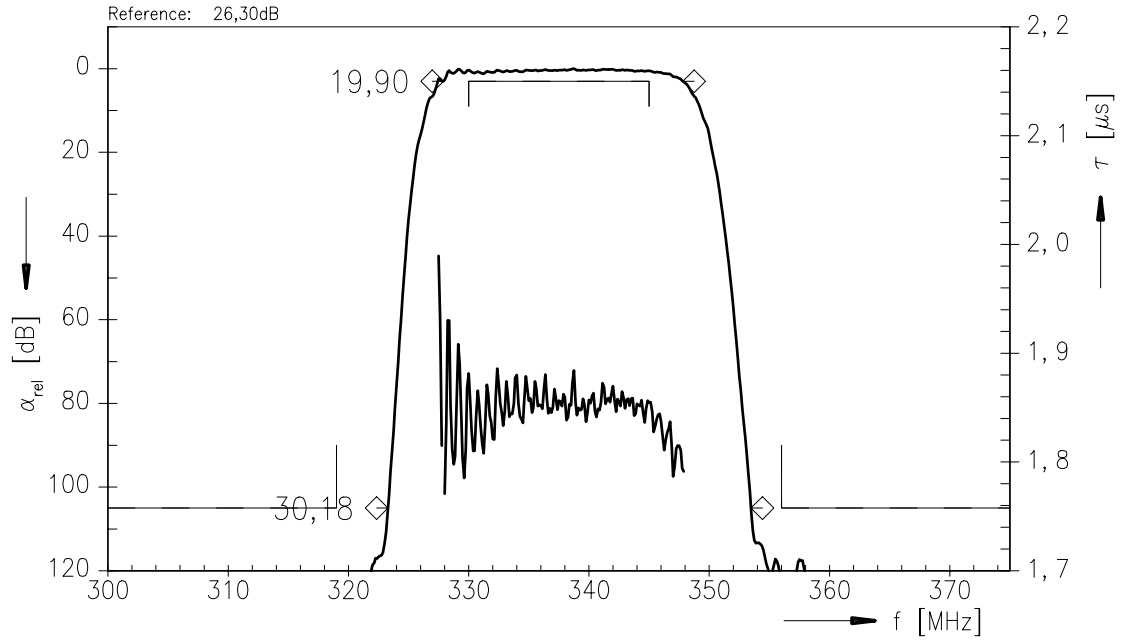
Normalized frequency response (pass band)





Data Sheet

Normalized frequency response of three cascaded filters





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