EPCOS

SAW Components

Preliminary Data LN07A

Preliminary Data

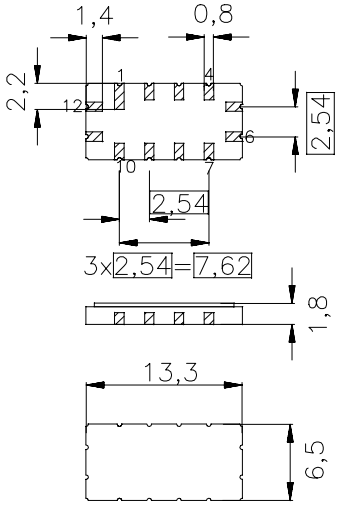
Features

- IF low-loss filter for CDMA base station
- Usable bandwidth 5 MHz
- Balanced or unbalanced operation possible
- Ceramic SMD package

Terminals

- Gold plated

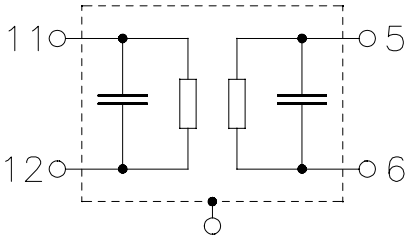
Ceramic package **QCC12**



Dimensions in mm, appr. weight 0,44 g

Pin configuration

11	Input
12	Input ground
5	Output
6	Output ground
2, 3, 8, 9	Case ground
1, 4, 7, 10	To be grounded



2, 3, 8, 9

Type	Ordering code	Marking and Package according to	Packing according to

Electrostatic **S**ensitive **D**evice (**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	0	dBm

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Characteristics

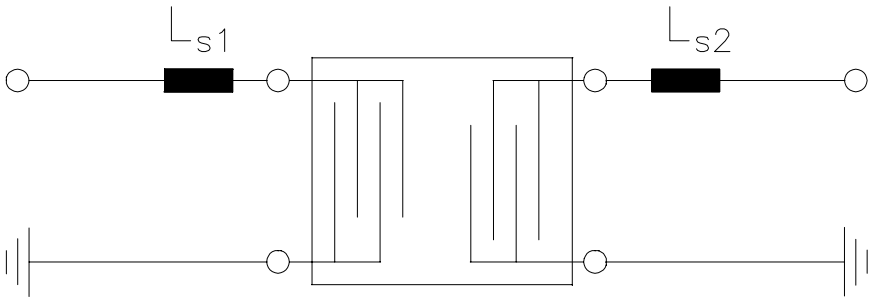
Operating temperature range: T = -10 .. 75 °C
Terminating source impedance: Z_S = 50 Ω and matching network
Terminating load impedance: Z_L = 50 Ω and matching network

			min.	typ.	max.	
Nominal frequency		f_N	—	70,0	—	MHz
Minimum insertion attenuation		α_{min}	—	9,0	9,5	dB
Passband width	$\alpha_{rel} \leq 1$ dB	B_{1dB}	6,2	6,3	—	MHz
Passband width	$\alpha_{rel} \leq 3$ dB	B_{3dB}	7,0	7,4	—	MHz
Bandwidth	$\alpha_{rel} \leq 40$ dB	B_{40dB}	—	11,5	11,95	MHz
Amplitude ripple (p-p)	$f_N \pm 2{,}5$ MHz	$\Delta\alpha$	—	0,6	1,0	dB
Absolute group delay (at f_N)		τ	—	1,08	—	µs
Group delay ripple)	$f_N \pm 2{,}5$ MHz	$\Delta\tau$	—	90	125	ns
Phase ripple (p-p)	$f_N \pm 2{,}5$ MHz	$\Delta\varphi$	—	5	8	°
Phase ripple (rms)	$f_N \pm 2{,}5$ MHz	$\Delta\varphi$	—	0,5	—	° rms
Relative attenuation (relative to α_{min})		α_{rel}				
f_N – 20 MHz ... f_N – 7 MHz			40	43	—	dB
f_N + 7 MHz ... f_N – 20 MHz			40	46	—	dB
Temperature coefficient of frequency		TC_f	—	– 87	—	ppm/K

Preliminary Data

Matching network to 50Ω

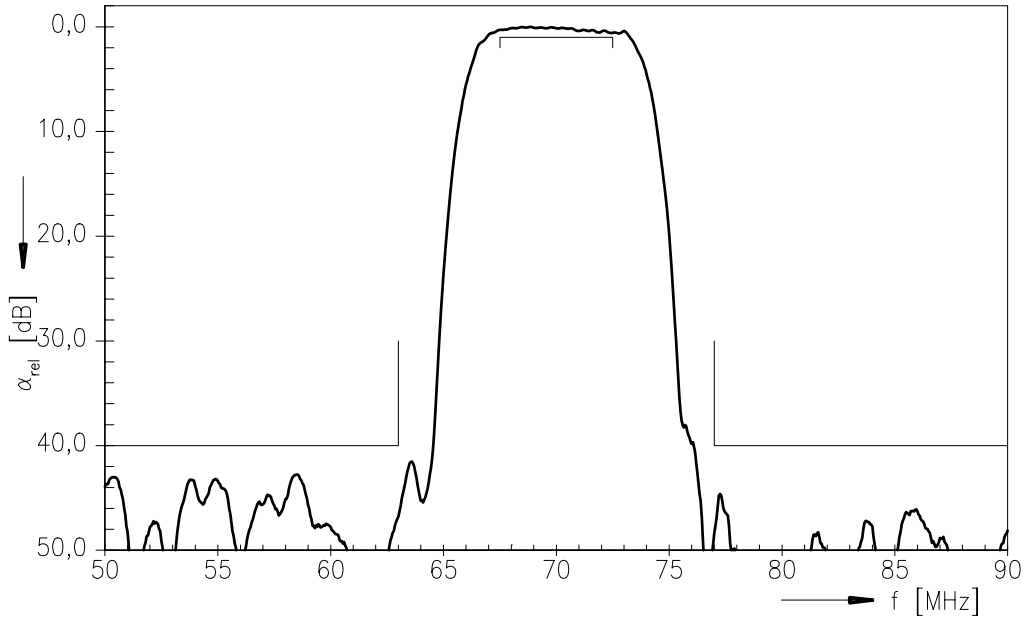
(Element values depend upon PCB layout)



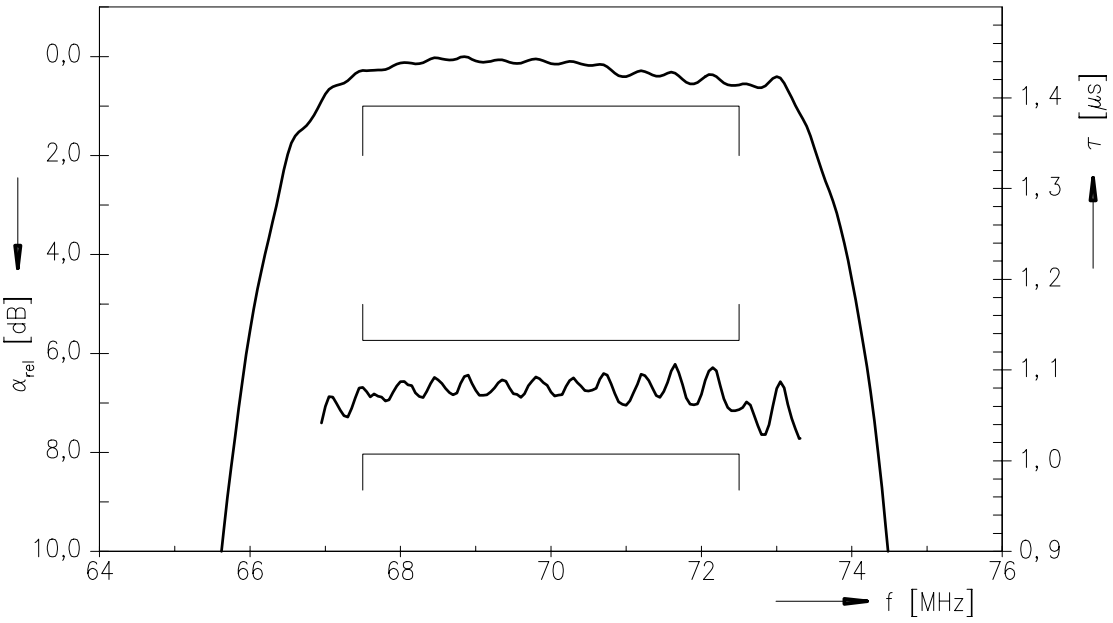
L_{s1} = 100 nH L_{s2} = 120 nH

Preliminary Data

Transfer function



Transfer function (pass band)



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