



SAW Components

SAW Bandstop Filter

DVB-T (E-GSM Rejection)

Series/Type:	LP38A
Ordering code:	
Date:	Nov 24, 2005
Version:	1.1



SAW Components

LP38A

Low-Loss Filter for Multimedia Applications

782.0 MHz

Preliminary Data



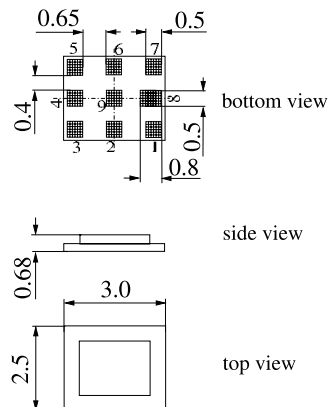
Application

- Low loss E-GSM reject filter for DVB-T
- Low insertion attenuation
- Low amplitude ripple
- Low group delay ripple
- Passband from 702 MHz ... 862 MHz



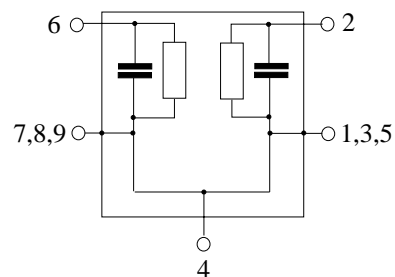
Features

- Package size 3.0 x 2.5 x 0.68 mm³
- Package code QCS9A
- RoHS compliant
- Approx. weight 0.015 g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals



Pin configuration

- 6 Input
- 2 Output
- 4 To be grounded
- 1,3,5,7,8,9 Case ground, to be grounded



Please read *cautions and warnings and important notes* at the end of this document.



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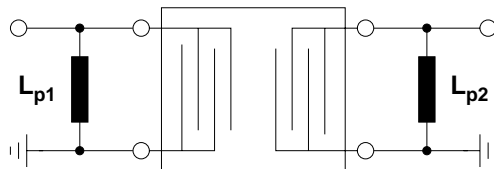
Characteristics

Operating temperature range: $T = -10\text{ °C to }+75\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$ and matching network
 Terminating load impedance: $Z_L = 50\ \Omega$ and matching network

		LP38A¹⁾			
		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	782.0	—	MHz
Maximum insertion attenuation	α_{max}	—	1.5	2.0	dB
702.00 ... 862.00 MHz					
Attenuation	α				
0.00 ... 108.00 MHz		40.0	60.0	—	dB
174.00 ... 230.00 MHz		30.0	40.0	—	dB
880.00 ... 915.00 MHz		25.0	28.0	—	dB
Group delay ripple (p-p)	$\Delta\tau$	—	13	—	ns
702.00 ... 862.00 MHz					

1) Values in columns min, typ and max indicate the development status of the current version.

Matching network (element values depend on PCB layout)



$L_{p1} = 6.2\text{ nH}$
 $L_{p2} = 6.2\text{ nH}$

Maximum ratings

Operable temperature range	T	-30/+85	°C	
Storage temperature range	T_{stg}	-40/+85	°C	
DC voltage	V_{DC}	3	V	
ESD voltage	$V_{ESD}^{1)}$	200	V	Machine Model, 10 pulses
Source power	P_S	24	dBm	source impedance 50 Ω (duty cycle 1:8)
880,0 ... 915,0 MHz				

1) according to JESD22-A115A (Machine Model), 10 negative and 10 positive pulses



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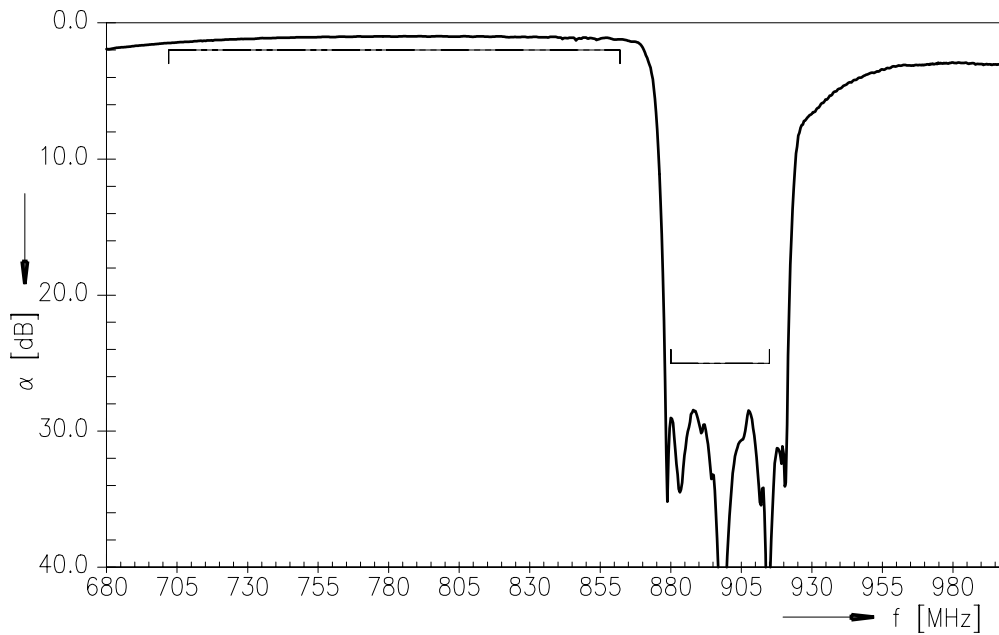
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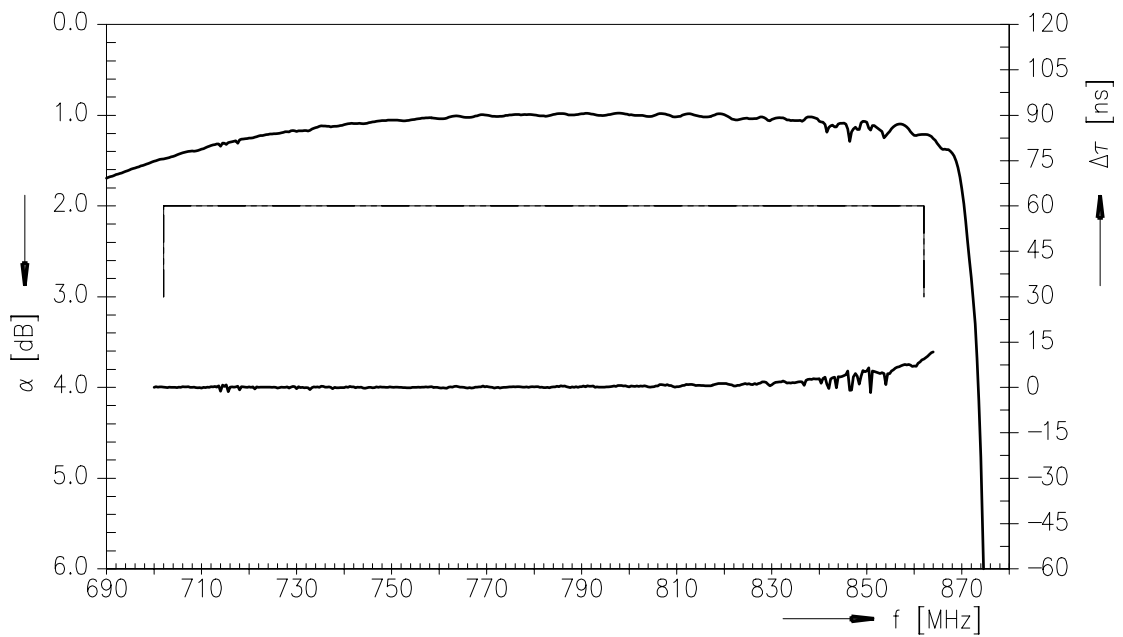
Preliminary Data



Transfer function



Transfer function (passband)



Please read *cautions and warnings* and *important notes* at the end of this document.



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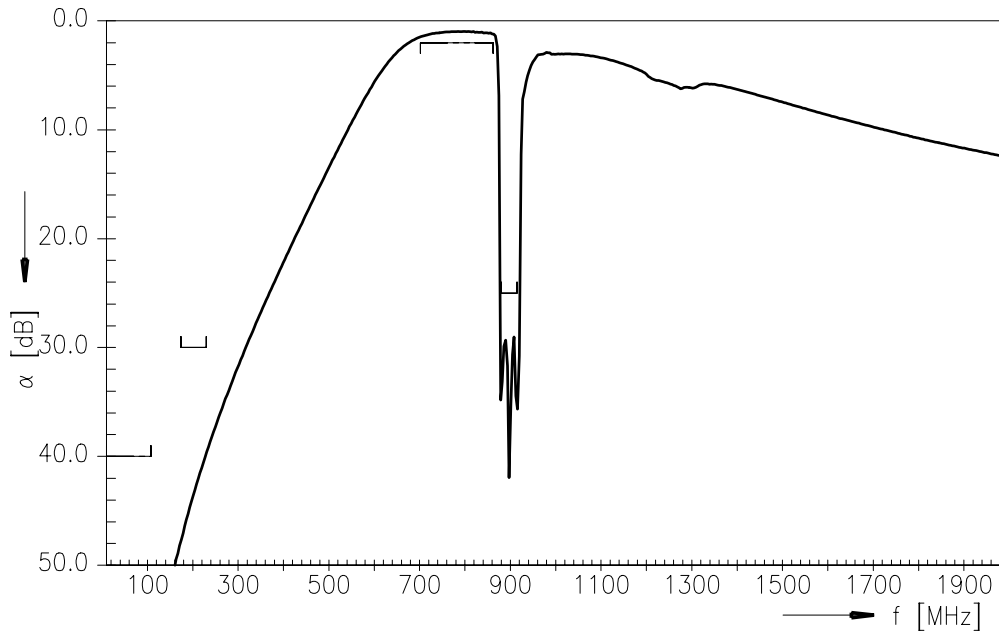
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Preliminary Data



Transfer function (wideband)



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Type	LP38A	
Ordering code		
Marking and Package	C61157-A3-A8	
Material Content		
Packaging	F61074-V8156-Z000	
Date Codes	L_1126	
S-Parameters	LP38A_NB_UN.s2p LP38A_WB_UN.s2p	unmatched
Soldering Profile	S_6001	

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

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