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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SAW Components

Data Sheet B7825

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a white, glowing, sans-serif font, appearing to be part of a larger, curved structure that resembles a globe or a complex circuit board layout. The background is dark and textured.



SAW Components

B7825

Low-Loss Filter for Mobile Communication

1960,0 MHz

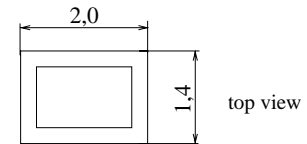
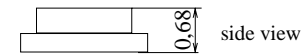
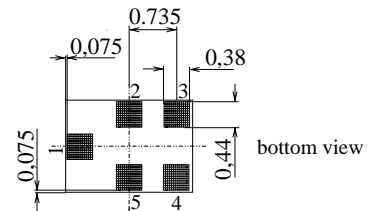
Data Sheet



Chip sized SAW package **QCS5C**

Features

- Low-loss RF filter for mobile telephone PCS systems, receive path
- Low amplitude ripple
- Usable passband 60 MHz
- Unbalanced to balanced operation
- Impedance transformation from 50 Ω to 150 Ω
- Suitable for GPRS class 1 to 12
- Package for **Surface Mounted Technology (SMT)**



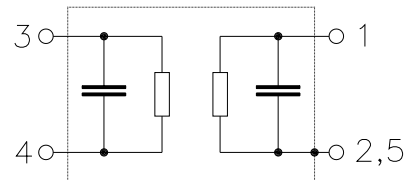
Terminals

- Gold-plated Ni

Dimensions in mm, approx. weight 0,007 g

Pin configuration

- 1 Input, unbalanced
- 2, 5 Input ground
- 3, 4 Output, balanced
- 2, 5 To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7825	B39202-B7825-C710	C61157-A7-A111	F61074-V8151-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operating temperature range	T	- 30/+ 85	°C	human body model
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	250	V	
Input power at				peak power of GSM signal, duty cycle 4:8
GSM850, GSM900	P_{IN}	15	dBm	
GSM1800,GSM1900	P_{IN}	12	dBm	
Tx bands				



Data Sheet



Characteristics

Operating temperature range: $T = 25^{\circ}\text{C} \pm 2^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 150 \Omega$ (balanced) || 18 nH

		min.	typ.	max.	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	α_{\max}				
1930,0 ... 1990,0 MHz		—	1,9	2,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1930,0 ... 1990,0 MHz		—	0,5	1,5	dB
Input VSWR					
1930,0 ... 1990,0 MHz		—	1,6	2,2	
Output VSWR					
1930,0 ... 1990,0 MHz		—	1,6	2,2	
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^{\circ}$)					
1930,0 ... 1990,0 MHz		-10	-7 / +7	10	degree
Output amplitude balance (S_{31}/S_{21})					
1930,0 ... 1990,0 MHz		-1,5	-0,9 / +0,9	1,5	dB
Attenuation	α				
10,0 ... 1000,0 MHz		45	59	—	dB
1000,0 ... 1830,0 MHz		25	33	—	dB
1830,0 ... 1910,0 MHz		15	18	—	dB
2010,0 ... 2070,0 MHz		14	17	—	dB
2070,0 ... 2120,0 MHz		24	30	—	dB
2120,0 ... 3000,0 MHz		28	31	—	dB
3000,0 ... 6000,0 MHz		40	53	—	dB



Data Sheet



Characteristics

Operating temperature range: $T = -20$ to $+85$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 150 \Omega$ (balanced) || 18 nH

		min.	typ.	max.	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	α_{max}	—	2,2	2,9	dB
1930,0 ... 1990,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,8	1,8	dB
1930,0 ... 1990,0 MHz					
Input VSWR		—	1,6	2,2	
1930,0 ... 1990,0 MHz					
Output VSWR		—	1,6	2,2	
1930,0 ... 1990,0 MHz					
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)		-10	-7 / +7	10	degree
1930,0 ... 1990,0 MHz					
Output amplitude balance (S_{31}/S_{21})		-1,5	-0,9 / +1,3	1,5	dB
1930,0 ... 1990,0 MHz					
Attenuation	α				
10,0 ... 1000,0 MHz		45	59	—	dB
1000,0 ... 1830,0 MHz		25	33	—	dB
1830,0 ... 1910,0 MHz		8	14	—	dB
2010,0 ... 2070,0 MHz		8	14	—	dB
2070,0 ... 2120,0 MHz		24	30	—	dB
2120,0 ... 3000,0 MHz		28	31	—	dB
3000,0 ... 6000,0 MHz		40	53	—	dB



Data Sheet



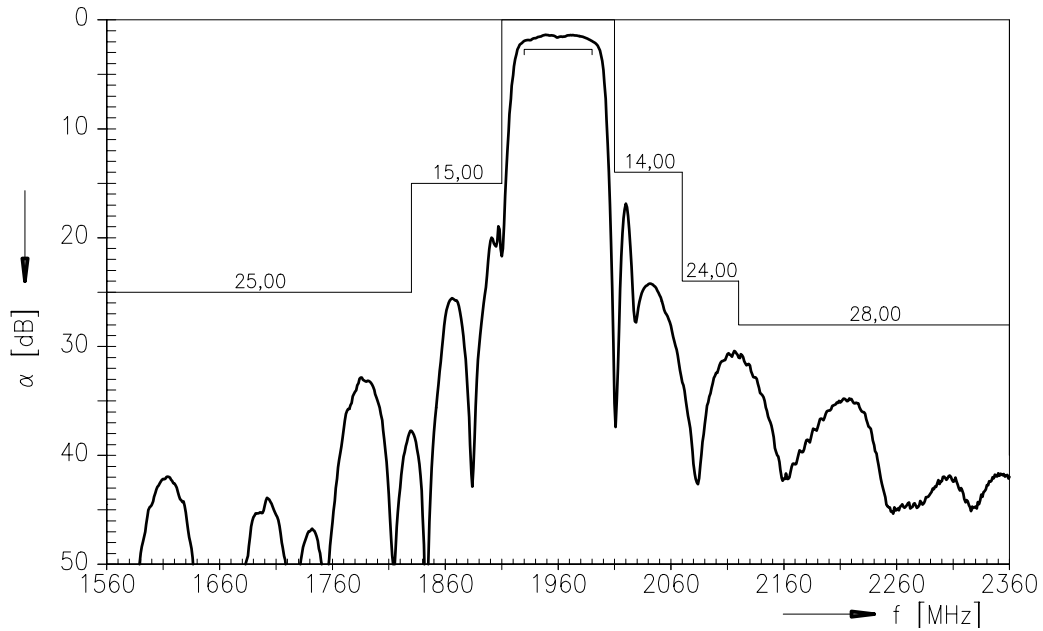
Characteristics

Operating temperature range: $T = -30$ to $+85$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 150 \Omega$ (balanced) || 18 nH

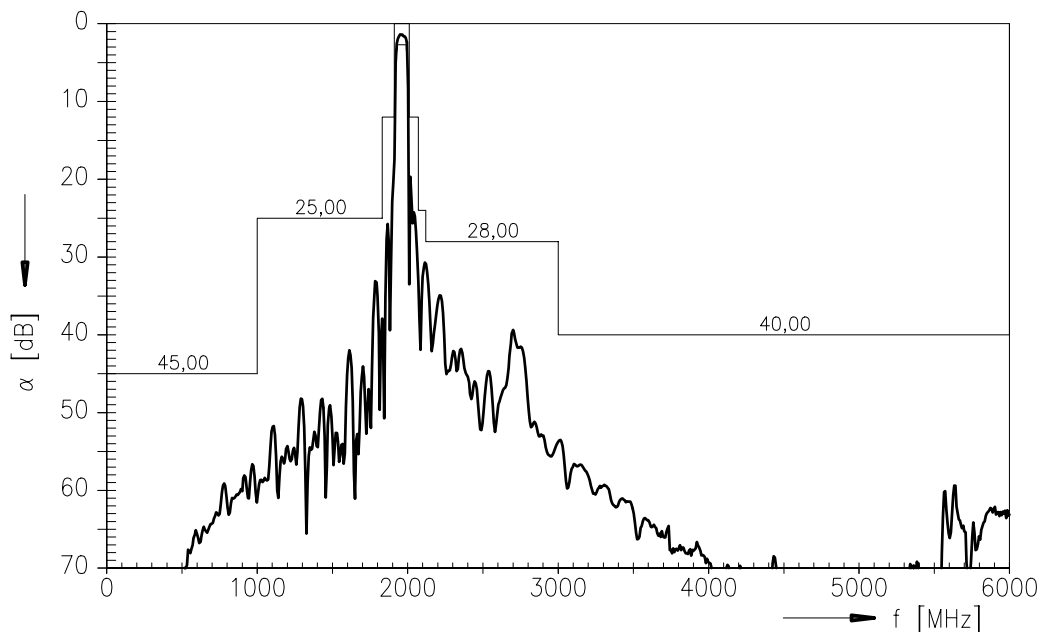
		min.	typ.	max.	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	α_{max}	—	2,2	2,9	dB
1930,0 ... 1990,0	MHz				
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,8	1,8	dB
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Input VSWR		—	1,6	2,2	
1930,0 ... 1990,0	MHz				
Output VSWR		—	1,6	2,2	
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Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)		-10	-7 / +7	10	degree
1930,0 ... 1990,0	MHz				
Output amplitude balance (S_{31}/S_{21})		-1,5	-0,9 / +1,3	1,5	dB
1930,0 ... 1990,0	MHz				
Attenuation	α				
10,0 ... 1000,0	MHz	45	59	—	dB
1000,0 ... 1830,0	MHz	25	33	—	dB
1830,0 ... 1910,0	MHz	8	14	—	dB
2010,0 ... 2070,0	MHz	7	13	—	dB
2070,0 ... 2120,0	MHz	24	30	—	dB
2120,0 ... 3000,0	MHz	28	31	—	dB
3000,0 ... 6000,0	MHz	40	53	—	dB



Transfer function (specification for $T = 25\text{ }^{\circ}\text{C}$)



Transfer function (wide band):





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1960,0 MHz

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