



SAW Components

Data Sheet B3511





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Low-Loss Filter for Telematics Application

1865,0 & 1895,0 MHz

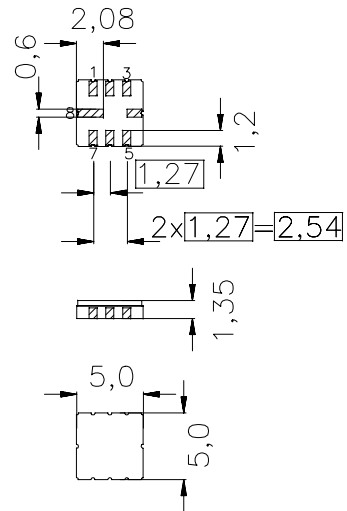
Data Sheet



Ceramic package **QCC8D**

Features

- Low-loss 2-in-1 RF filter for mobile telephone PCS systems, transmit path
- Device with two integrated Tx-filter
- Usable passband of Tx-filter 1 30 MHz
- Usable passband of Tx-filter 2 30 MHz
- No matching network required for operation at 50 Ω
- Package for **Surface Mounted Technology (SMT)**
- Extended temperature range for automotive application



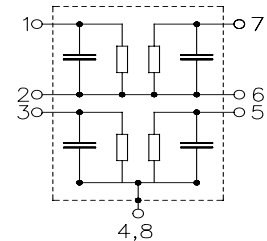
Dimensions in mm, approx. weight 0,037 g

Terminals

- Ni, gold-plated

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B3511	B39192-B3511-U810	C61157-A7-A72	F61074-V8101-Z000

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

Maximum ratings

Operable temperature range	T	- 40 /+ 85	°C	source and load impedance 50 Ω continuous wave
Storage temperature range	T_{stg}	- 40 /+ 85	°C	
DC voltage	V_{DC}	0	V	
Input power max.				
1850...1910 MHz	P_{IN}	10	dBm	



Characteristics of Tx-filter 1

Operating temperature range: $T = -40$ to $+85$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1865,0	—	MHz
Maximum insertion attenuation	α_{max}		—	1,8	3,0	dB
1850,0 ... 1880,0	MHz					
Amplitude ripple (p-p)	$\Delta\alpha$		—	0,7	1,7	dB
1850,0 ... 1880,0	MHz					
Input return loss			9,0	10,0	—	dB
1850,0 ... 1880,0	MHz					
Output return loss			9,0	10,0	—	dB
1850,0 ... 1880,0	MHz					
Attenuation	α					dB
10,0 ... 1770,0	MHz		24,0	26,0	—	
1770,0 ... 1800,0	MHz		26,0	30,0	—	
1930,0 ... 1960,0	MHz		36,0	41,0	—	
2113,0 ... 2174,0	MHz		32,0	34,0	—	
2200,0 ... 3000,0	MHz		20,0	26,0	—	



Characteristics of Tx-filter 2

Operating temperature range: $T = -40$ to $+85$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

				min.	typ.	max.	
Center frequency	f_c			—	1895,0	—	MHz
Maximum insertion attenuation	α_{max}			—	1,8	3,0	dB
		1880,0 ... 1910,0	MHz				
Amplitude ripple (p-p)	$\Delta\alpha$			—	0,7	1,7	dB
		1880,0 ... 1910,0	MHz				
Input return loss				9,0	10,0	—	dB
		1880,0 ... 1910,0	MHz				
Output return loss				9,0	10,0	—	dB
		1880,0 ... 1910,0	MHz				
Attenuation	α						
		10,0 ... 1800,0	MHz	24,0	26,0	—	dB
		1800,0 ... 1830,0	MHz	26,0	29,0	—	dB
		1960,0 ... 1990,0	MHz	36,0	41,0	—	dB
		2113,0 ... 2174,0	MHz	32,0	34,0	—	dB
		2200,0 ... 3000,0	MHz	20,0	26,0	—	dB



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