



# SAW Components

Data Sheet R2711





**SAW Components**

**R2711**

**Resonator**

**868,35 MHz**

**Data Sheet**

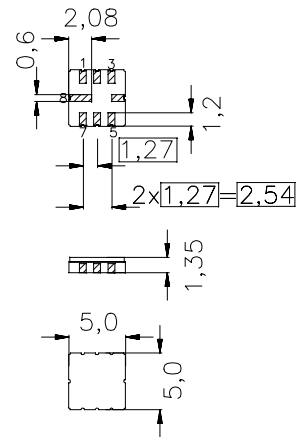
SMD Ceramic package **QCC8C**

**Features**

- 2-port resonator
- nominal 180°-phase at resonance
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators
- Passivation layer: Protec

**Terminals**

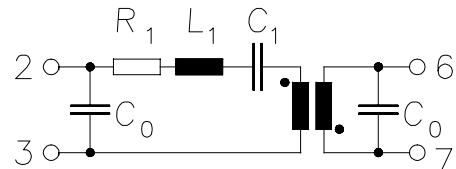
- Ni, gold plated



Dimensions in mm, approx. weight 0,1 g

**Pin configuration**

- |     |                         |
|-----|-------------------------|
| 2   | Input / Output          |
| 6   | Output / Input          |
| 7   | Ground (Input / Output) |
| 3   | Ground (Output / Input) |
| 4,8 | Ground (case)           |



Type	Ordering code	Marking and Package according to	Packing according to
R2711	B39871-R2711-U310	C61157-A7-A56	F61074-V8169-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T_A$	-45/+85	°C	between any terminals
Storage temperature range	$T_{stg}$	-45/+85	°C	
DC voltage	$V_{DC}$	0	V	
Source power	$P_s$	0	dBm	



**SAW Components**

**R2711**

**Resonator**

**868,35 MHz**

**Data Sheet**

**Characteristics**

Reference temperature:  $T_A = 25\text{ °C}$   
 Terminating Source impedance:  $Z_S = 50\ \Omega$   
 Terminating Load impedance:  $Z_L = 50\ \Omega$

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Center frequency</b> (center frequency between 3 dB points)	$f_c$	868,25	868,35	868,45	MHz
<b>Minimum insertion attenuation</b>	$\alpha_{\min}$	—	7,0	9,0	dB
Phase at $f_c$	$\varphi$	—	130	—	° el.
Loaded quality factor	$Q_L$	3000	3600	—	
Unloaded quality factor	$Q_U$	5500	6600	—	
<b>Ageing of <math>f_c</math></b>		—	—	-10/+40	ppm
<b>Equivalent circuit elements</b>					
Motional capacitance	$C_1$	—	0,279	—	fF
Motional inductance	$L_1$	—	120,4	—	$\mu\text{H}$
Motional resistance	$R_1$	—	100	—	$\Omega$
Input / Output capacitance	$C_0$	—	1,9	—	pF
<b>Temperature coefficient of frequency</b> <sup>1)</sup>	$TC_f$	—	-0,03	—	ppm/K <sup>2</sup>
Turnover temperature	$T_0$	15	—	35	°C

<sup>1)</sup> Temperature dependence of  $f_c$ :  $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$



**SAW Components**

**R2711**

**Resonator**

**868,35 MHz**

**Data Sheet**

**Published by EPCOS AG**

**Surface Acoustic Wave Components Division, SAW CE AE PD**

**P.O. Box 80 17 09, D-81617 München**

© EPCOS AG 2003. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.