

# **SAW Components**

Data Sheet R 715





SAW Components	R 715
Resonator	433,32 MHz

**Data Sheet** 

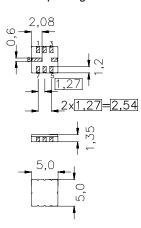
#### **Features**

- 1-port resonator
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators

#### **Terminals**

■ Ni, gold plated

#### SMD Ceramic package QCC8C



Dimensions in mm, approx. weight 0,1 g

### Pin configuration

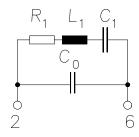
2 Input

6 Output, grounded in 1-port conf.

4,8 Ground (case)

1,3 float

5,7 float / ground



Туре	Ordering code	Marking and Package	Packing		
		according to	according to		
R 715	B39431-R 715-U310	C61157-A7-A56	F61074-V8023-Z000		

Electrostatic Sensitive Device (ESD)

# **Maximum ratings**

Operable temperature range	$T_{A}$	-45/+85	°C	
Storage temperature range	$T_{\rm stg}$	-45/+85	°C	
DC voltage	$V_{\rm DC}$	12	V	between any terminals
Source power	$P_{\rm s}$	0	dBm	



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#### **Characteristics**

 $\begin{array}{ll} \mbox{Reference temperature:} & T_{\mbox{A}} = 25 \ ^{\circ}\mbox{C} \\ \mbox{Terminating Source impedance:} & Z_{\mbox{S}} = 50 \ \Omega \\ \mbox{Terminating Load impedance:} & Z_{\mbox{L}} = 50 \ \Omega \end{array}$ 

		min.	typ.	max.	
Center frequency 1)	$f_{\rm c}$	433,245	433,32	433,395	MHz
Minimum insertion attenuation	$\alpha_{min}$	_	1,4	1,9	dB
Unloaded quality factor	$Q_U$	7000	13000	_	
Ageing of f <sub>c</sub>		_	_	±50	ppm
Equivalent circuit elements					
Motional capacitance	$C_1$	_	1,81	_	fF
Motional inductance	$L_1$	_	74,53	_	μН
Motional resistance	$R_1$	_	16	30	Ω
Parallel Capacitance 2)	$C_0$	_	3,3	_	pF
Temperature coefficient of frequency 3)	$TC_{f}$	_	- 0,032	_	ppm/K <sup>2</sup>
Turnover temperature	$T_0$	0	_	30	°C

<sup>1)</sup> Center frequency is defined as maximum of the real part of the admittance

 $<sup>^{2)}</sup>$  If used in two port configuration (pin 2-input, pin 6-output)  $C_0$  is reduced by approx. 0,3 pF.

<sup>&</sup>lt;sup>3)</sup>Temperature dependence of  $f_c$ :  $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$ 



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## **Published by EPCOS AG** Surface Acoustic Wave Components Division, SAW CE AE PD P.O. Box 80 17 09, D-81617 München

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