

SAW Filter

Series/Type: R854

The following products presented in this data sheet are being withdrawn.

| Ordering Code | Substitute Product | | Deadline Last Orders | Last Shipments |
|-----------------|--------------------|------------|-------------------------|----------------|
| B39311R0854H210 | | 2009-11-02 | 2010-02-28 | 2010-05-31 |

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.



| SAW Components | R 854 |
|----------------|------------|
| Resonator | 314,50 MHz |

Data Sheet

SMD

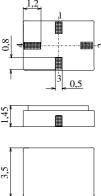
Ceramic package QCC4A

Features

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

Terminals

■ Ni, gold plated

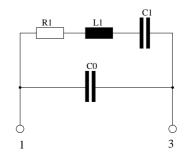


5,0

Dimensions in mm, approx. weight 0,1 g

Pin configuration

- 1 Input
- 3 Output, grounded in 1-port conf.
- 2,4 Ground (case)



| Туре | Ordering code | Marking and Package | Packing | | |
|------|------------------|---------------------|-------------------|--|--|
| | | according to | according to | | |
| R854 | B39311-R854-H210 | C61157-A7-A86 | F61074-V8175-Z000 | | |

Electrostatic Sensitive Device (ESD)

Maximum ratings

| Operable temperature range | T_{A} | -40/+125 | °C | |
|----------------------------|---------------|----------|-----|-----------------------|
| Storage temperature range | $T_{\rm stg}$ | -40/+125 | °C | |
| DC voltage | $V_{\rm DC}$ | 12 | V | between any terminals |
| Source power | P_{s} | 0 | dBm | - |



SAW Components R 854

Resonator 314,50 MHz

Data Sheet

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) | $f_{\rm C}$ | 314,45 | 314,50 | 314,55 | MHz |
| Minimum insertion attenuation | α_{min} | _ | 1,3 | 1,6 | dB |
| Unloaded quality factor | Q_{U} | 9700 | 13200 | _ | |
| Ageing of f _c | | _ | _ | -10/+50 | ppm |
| Equivalent circuit elements | | | | | |
| Motional capacitance | C_1 | _ | 2,37 | _ | fF |
| Motional inductance | L_1 | _ | 107,99 | _ | μΗ |
| Motional resistance | R_1 | _ | 16 | 22 | Ω |
| Parallel capacitance 2) | C_0 | _ | 3,0 | _ | pF |
| Temperature coefficient of frequency 3) | TC _f | _ | -0,032 | _ | ppm/K ² |
| Turnover temperature | T_{0} | 15 | _ | 35 | °C |

¹⁾ Center frequency is defined as maximum of the real part of the admittance

 $^{^{2)}}$ If used in two port configuration (pin 1-input, pin 3-output) C_0 is reduced by approx. 0,3 pF.

³⁾Temperature dependence of f_c : $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$



Resonator R 854

Resonator 314,50 MHz

Data Sheet

Published by EPCOS AG Surface Acoustic Wave Components Division, SAW CE AE P.O. Box 80 17 09, 81617 Munich, GERMANY

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

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.