

RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

## **SAW Components**

SAW filter

Double conversion

Series/type: B1619 Ordering code: B39172 B1619 U810

Date:February 11, 2011Version:2.1

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## **公TDK**

| SAW Components |     | B1619       |
|----------------|-----|-------------|
| SAW filter     |     | 1690.00 MHz |
| Data sheet     | SMD |             |

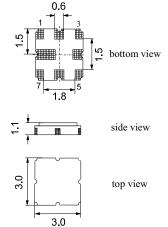
#### Application

- Low–loss RF filter
- Balanced to balanced operation
- Low group delay ripple



### Features

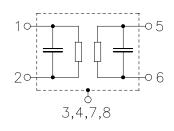
- Package size 3.0 x 3.0 x 1.1 mm<sup>3</sup>
- Package code QCC8D
- RoHS compatible
- Approximate weight 0.037 g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals
- Electrostactic Sensitive Device (ESD)



### **Pin configuration**

| ■ 1 I | nput |
|-------|------|
|-------|------|

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



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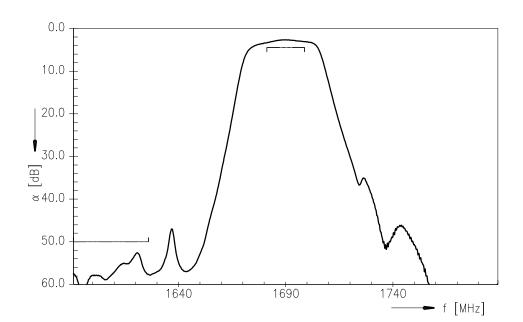
| SAW Components   |                |                           |                 |      | B1619      |
|--|----------------|---------------------------|-----------------|------|------------|
| SAW filter   |                |                           |                 | 169  | 0.00 MHz   |
| Data sheet   | SM             |                           |                 |      |            |
| Characteristics  |                |                           |                 |      |            |
| Operating temperature range:<br>Terminating source impedance:<br>Terminating load impedance: |                | 0 °C to<br>190 Ω<br>190 Ω | +70 °C          |      |            |
|  |                | min.                      | typ.<br>@ 25 °C | max. |            |
| Center frequency   | f <sub>C</sub> | _                         | 1690.00         | —    | MHz        |
| Maximum insertion attenuation<br>1681.20 1698.80 MHz   | $lpha_{max}$   | _                         | 4.00            | 4.50 | dB         |
| Amplitude ripple in any 6.5 MHz band<br>1681.20 1698.80 MHz                                  |                | _                         | 0.50            | 1.00 | dB         |
| Pass bandwidth $lpha_{rel} \leq 3 \text{ dB}$ $lpha_{rel} \leq 10 \text{ dB}$                |                | _                         | 33.00<br>40.00  | _    | MHz<br>MHz |
| Attenuation<br>1577.00 1626.00 MHz   | α              | 50.00                     | 53.00           | _    | dB         |
| <b>Group delay ripple</b> (p-p)<br>1681.20 1698.80 MHz                                       |                | —                         | 15.00           | _    | ns         |

### Maximum ratings

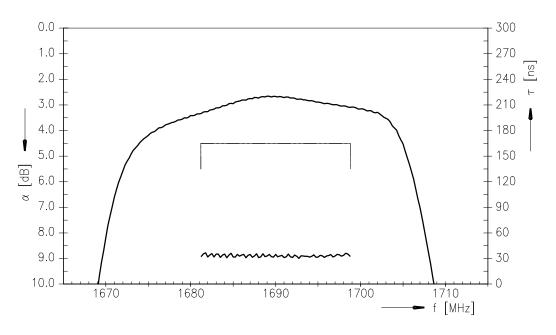
| Operable temperature range | Т                | -45/+85 | °C  |                               |
|----------------------------|------------------|---------|-----|-------------------------------|
| Storage temperature range  | T <sub>stg</sub> | -45/+85 | °C  |                               |
| DC voltage                 | V <sub>DC</sub>  | 0       | V   |                               |
| Source power               | Ps               | 0       | dBm | source impedance 190 $\Omega$ |

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### **Transfer function**



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SAW Components

B1619 1690.00 MHz

SAW filter Data sheet

SMD

#### References

| Туре                | B1619   |
|---------------------|---|
| Ordering code       | B39172-B1619-U810   |
| Marking and package | C61157-A7-A72   |
| Packaging           | F61074-V8168-Z000   |
| Date codes          | L_1126  |
| S-parameters        | B1619_NB_UN.s4p<br>B1619_WB_UN.s4p  |
| Soldering profile   | S_6001  |
| RoHS compatible     | defined as compatible with the following documents:<br>"DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT<br>AND OF THE COUNCIL of 27 January 2003 on the restriction<br>of the use of certain hazardous substances in electrical and<br>electronic equipment. 2005/618/EC from April 18th, 2005,<br>amending Directive 2002/95/EC of the European Parliament<br>and of the Council for the purposes of establishing the maxi-<br>mum concentration values for certain hazardous substances in<br>electrical and electronic equipment." |

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