



# SAW Components

## SAW filter

Short range devices

|                       |                        |
|-----------------------|------------------------|
| <b>Series/type:</b>   | <b>B3722</b>           |
| <b>Ordering code:</b> | <b>B39321B3722U410</b> |
| <b>Date:</b>          | January 31, 2011       |
| <b>Version:</b>       | 2.5                    |



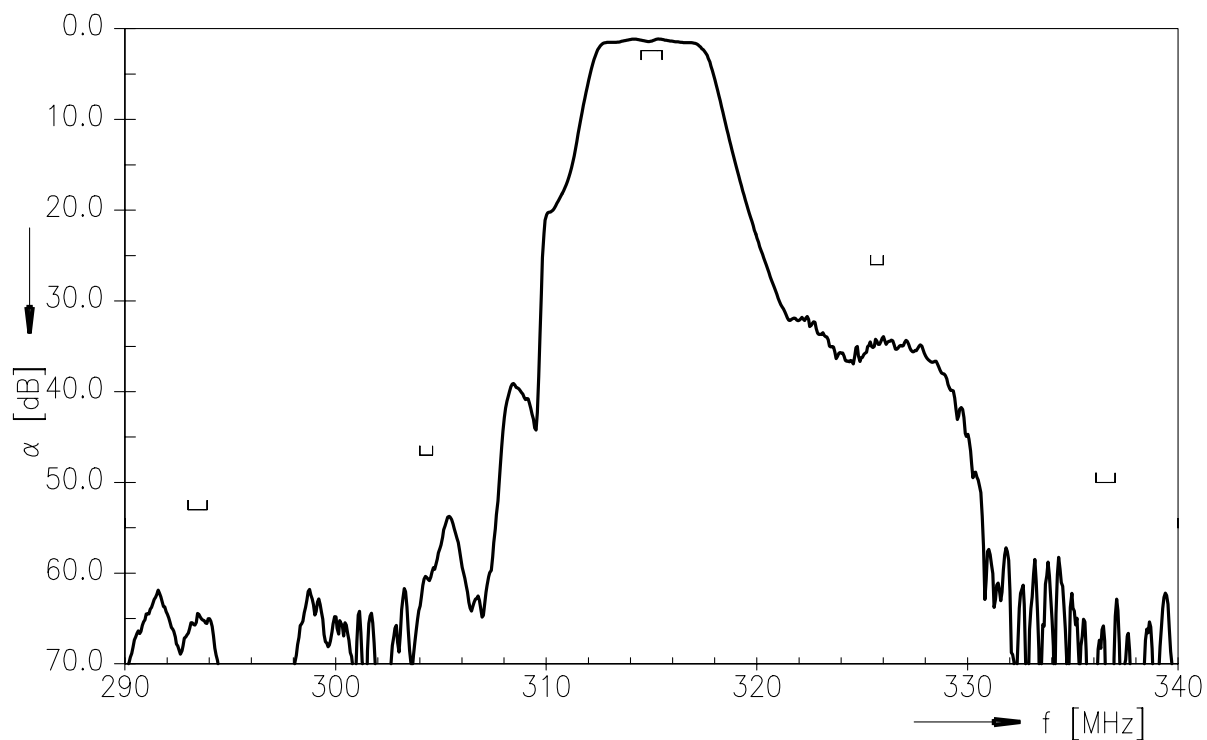
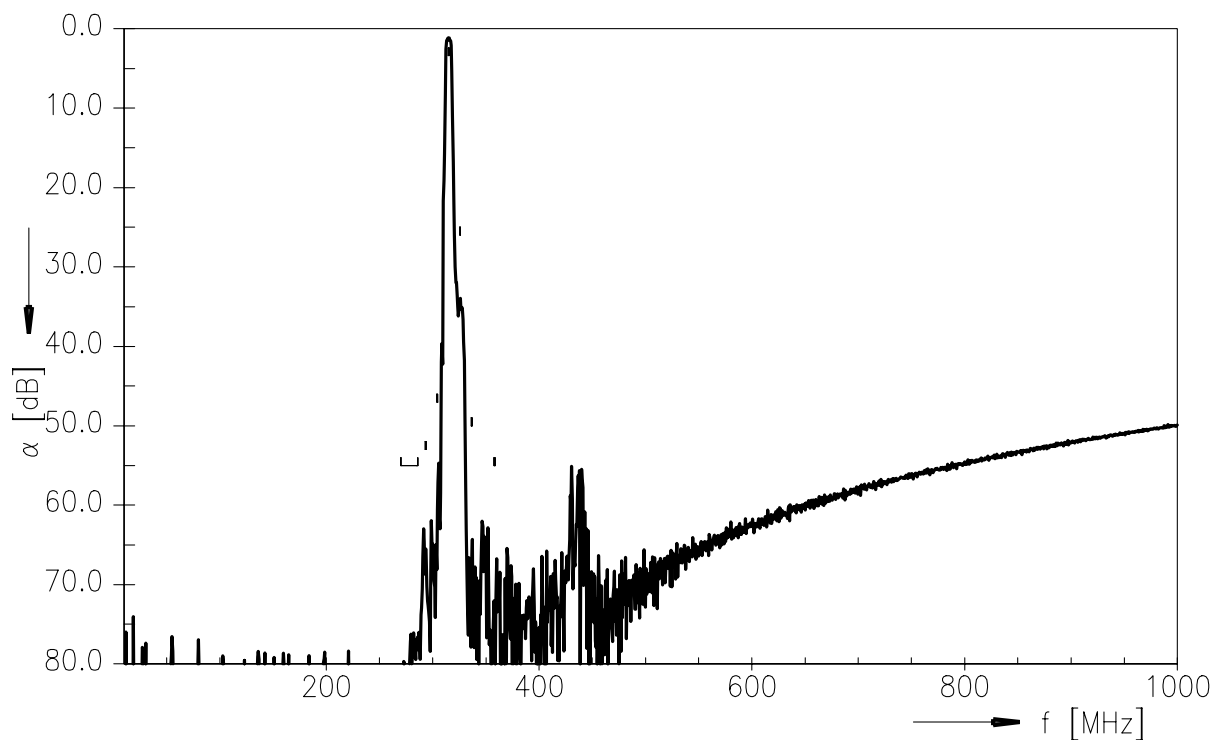
**Characteristics**

Temperature range for specification:  $T = -40\text{ °C to }+105\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

|                                      |                 | min. | typ.<br>@ 25 °C | max. |     |
|--------------------------------------|-----------------|------|-----------------|------|-----|
| <b>Center frequency</b>              | $f_C$           | —    | 315.00          | —    | MHz |
| <b>Maximum insertion attenuation</b> | $\alpha_{\max}$ |      |                 |      |     |
| 314.50 ... 315.50 MHz                |                 | —    | 1.4             | 1.9  | dB  |
| <b>Amplitude ripple (p-p)</b>        | $\Delta\alpha$  |      |                 |      |     |
| 314.50 ... 315.50 MHz                |                 | —    | 0.4             | 1.0  | dB  |
| <b>Input VSWR</b>                    |                 |      |                 |      |     |
| 314.50 ... 315.50 MHz                |                 | —    | 1.2             | 1.6  |     |
| <b>Output VSWR</b>                   |                 |      |                 |      |     |
| 314.50 ... 315.50 MHz                |                 | —    | 1.2             | 1.6  |     |
| <b>Attenuation</b>                   | $\alpha$        |      |                 |      |     |
| 270.00 ... 286.00 MHz                |                 | 55   | 60              | —    | dB  |
| 293.00 ... 293.90 MHz                |                 | 53   | 58              | —    | dB  |
| 304.00 ... 304.60 MHz                |                 | 47   | 52              | —    | dB  |
| 325.40 ... 326.00 MHz                |                 | 26   | 31              | —    | dB  |
| 336.10 ... 337.00 MHz                |                 | 50   | 55              | —    | dB  |
| 357.50 ... 358.70 MHz                |                 | 55   | 60              | —    | dB  |

**Maximum ratings**

|                            |                  |          |     |                       |
|----------------------------|------------------|----------|-----|-----------------------|
| Operable temperature range | T                | −45/+125 | °C  |                       |
| Storage temperature range  | T <sub>stg</sub> | −45/+125 | °C  |                       |
| DC voltage                 | V <sub>DC</sub>  | 6        | V   |                       |
| Source power               | P <sub>S</sub>   | 13       | dBm | source impedance 50 Ω |

**Transfer function**

**Transfer function (wideband)**


**References**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type</b>                | B3722                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Ordering code</b>       | B39321B3722U410                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Marking and package</b> | C61157-A7-A67                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Packaging</b>           | F61074-V8228-Z000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Date codes</b>          | L_1126                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>S-parameters</b>        | B3722_NB.s2p, B3722_WB.s2p<br>see file header for port/pin assignment table                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Soldering profile</b>   | S_6001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>RoHS compatible</b>     | defined as compatible with the following documents:<br>"DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment." |
| <b>Matching coils</b>      | See Inductor pdf-catalog<br><a href="http://www.tdk.co.jp/tefe02/coil.htm#aname1">http://www.tdk.co.jp/tefe02/coil.htm#aname1</a><br>and Data Library for circuit simulation<br><a href="http://www.tdk.co.jp/etvcl/index.htm">http://www.tdk.co.jp/etvcl/index.htm</a>                                                                                                                                                                                                                                        |

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