

## SAW Filter for GSM Base Station

For Industrial Use

### ■ Features

- A low-loss filter.
- With a low-band ripple.
- Excellent group delay characteristics.
- Excellent guaranteed attenuation.

Pb  
Free

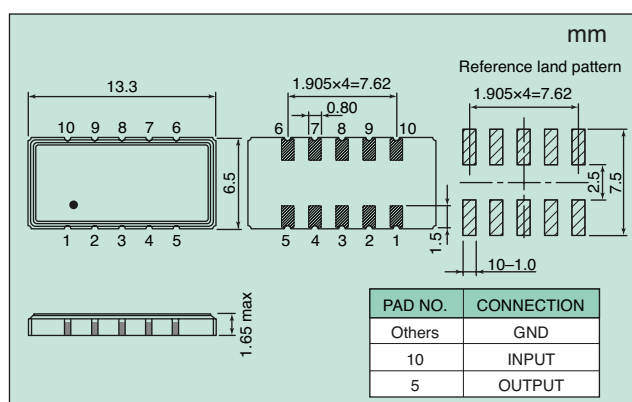
RoHS Compliant  
Directive 2002/95/EC



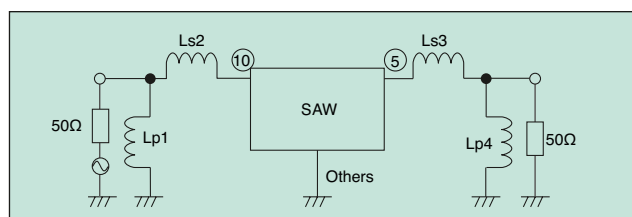
### ■ Specifications

| Model                                                     |                                          | WF972A0125CG     |      |      |
|-----------------------------------------------------------|------------------------------------------|------------------|------|------|
| Item                                                      |                                          | min.             | typ. | max. |
| Nominal frequency : $f_0$ (MHz)                           |                                          | —                | 125  | —    |
| Minimal insertion loss (dB)                               |                                          | —                | 5.6  | 7    |
| 1-dB passband width (MHz)                                 |                                          | 0.4              | 0.7  | —    |
| In-band deviation (dB p-p)( $f_0 \pm 0.2$ MHz)            |                                          | —                | 0.5  | 1.0  |
| Absolute group delay time (ns)(at $f_0$ )                 |                                          | 700              | 1075 | 1700 |
| Group delay deviation (ns p-p)( $f_0 \pm 0.2$ MHz)        |                                          | —                | 85.0 | 120  |
| Out-of-band attenuation (from the minimal insertion loss) |                                          | —                | —    | —    |
| Guaranteed attenuation (dB)                               | $f_0 \pm 0.4$ MHz to $f_0 \pm 0.6$ MHz   | 0                | 2    | —    |
|                                                           | $f_0 \pm 0.6$ MHz to $f_0 \pm 1.2$ MHz   | 8                | 11   | —    |
|                                                           | $f_0 \pm 1.2$ MHz to $f_0 \pm 1.8$ MHz   | 20               | 31   | —    |
|                                                           | $f_0 \pm 1.8$ MHz to $f_0 \pm 3.4$ MHz   | 25               | 44   | —    |
|                                                           | $f_0 \pm 3.4$ MHz to $f_0 \pm 6.5$ MHz   | 34               | 47   | —    |
|                                                           | $f_0 \pm 6.5$ MHz to $f_0 \pm 9.5$ MHz   | 40               | 41   | —    |
|                                                           | *1 $f_0 \pm 9.5$ MHz to $f_0 \pm 17$ MHz | 43               | 51   | —    |
|                                                           | *1 $f_0 - 115$ MHz to $f_0 - 17$ MHz     | 55               | 65   | —    |
| Operating temperature range (°C)                          |                                          | —10              | —    | 85   |
|                                                           |                                          |                  |      |      |
| Terminating impedance (Ω)                                 |                                          | 50 with matching |      |      |

### ■ Dimensions



### ■ Matching Circuit



### ■ Characteristics

