Data Sheet of SAW Components

Note: Murata SAW Component is applicable for Cellular/Cordless phone (Terminal) relevant market only. Please also read caution at the end of this document.
SAW FILTER FOR GPS
Murata part number : SAFEB1G57KE0F00

**Package Dimensions**

![Top View Diagram]

- **Dot Marking**: Laser Printing
- **Marking**: Laser Printing
- **Unit**: mm

**Specification**

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Center Frequency (f_c)</td>
<td>1575.5 MHz</td>
</tr>
<tr>
<td>Insertion Loss (1573.92 to 1576.92 MHz)</td>
<td>1.3 dB max., 1.2 dB max., 0.95 dB</td>
</tr>
<tr>
<td>Absolute Attenuation</td>
<td></td>
</tr>
<tr>
<td>1) 0.1 to 250 MHz</td>
<td>40 dB min., 40 dB min., 48 dB</td>
</tr>
<tr>
<td>2) 250 to 810 MHz</td>
<td>41 dB min., 41 dB min., 42 dB</td>
</tr>
<tr>
<td>3) 810 to 960 MHz</td>
<td>40 dB min., 40 dB min., 42 dB</td>
</tr>
<tr>
<td>4) 960 to 1429 MHz</td>
<td>40 dB min., 40 dB min., 42 dB</td>
</tr>
<tr>
<td>5) 1429 to 1453 MHz</td>
<td>40 dB min., 40 dB min., 53 dB</td>
</tr>
<tr>
<td>6) 1453 to 1525.42 MHz</td>
<td>37 dB min., 37 dB min., 43 dB</td>
</tr>
<tr>
<td>7) 1525 to 1560 MHz</td>
<td>1.1 dB min., 1.1 dB min., 1.6 dB</td>
</tr>
<tr>
<td>8) 1625 to 1710 MHz</td>
<td>40 dB min., 40 dB min., 46 dB</td>
</tr>
<tr>
<td>9) 1710 to 1749.9 MHz</td>
<td>43 dB min., 43 dB min., 46 dB</td>
</tr>
<tr>
<td>10) 1749.9 to 1785 MHz</td>
<td>44 dB min., 44 dB min., 46 dB</td>
</tr>
<tr>
<td>11) 1785 to 1920 MHz</td>
<td>43 dB min., 43 dB min., 47 dB</td>
</tr>
<tr>
<td>12) 1920 to 1990 MHz</td>
<td>43 dB min., 43 dB min., 50 dB</td>
</tr>
<tr>
<td>13) 1990 to 2170 MHz</td>
<td>45 dB min., 45 dB min., 50 dB</td>
</tr>
<tr>
<td>14) 2170 to 2700 MHz</td>
<td>40 dB min., 40 dB min., 44 dB</td>
</tr>
<tr>
<td>15) 2700 to 6000 MHz</td>
<td>30 dB min., 30 dB min., 33 dB</td>
</tr>
<tr>
<td>Ripple Deviation (1573.92 to 1576.92 MHz)</td>
<td>0.6 dB max., 0.5 dB max., 0.03 dB</td>
</tr>
<tr>
<td>VSWR (1573.92 to 1576.92 MHz)</td>
<td>1.7 max., 1.5 max., 1.2</td>
</tr>
<tr>
<td>Input/Output Impedance (nominal)</td>
<td>50Ω</td>
</tr>
<tr>
<td>Input Signal Level</td>
<td>50mW (+17dBm), 2000 hours</td>
</tr>
</tbody>
</table>
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■ Frequency Performance
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Dimensions of Carrier Tape

Dimensions of Tape

Dimensions of Reel

SAFEB1G57KE0F00R15 … 5000pcs/reel
SAFEB1G57KE0F00R00 … 10000pcs/reel

Unit: mm
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Murata part number: SAFEB1G57KE0F00

- **Recommended Land Pattern**

- **Test Circuit**
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RoHS Compliance

This component is compliant with RoHS directive.

This component was always RoHS compliant from the first date of manufacture.

• Caution - Limitation of Applications
  This product is intended for the following applications only; however, please do not use this product in these applications where defects might directly cause damage to a third party’s life, body or property.

  a. Mobile Telephone
  b. Cordless phone (except for Automotive use)
  c. PC (Including Notebook PC, Netbook PC, Tablet)
  d. Game
  e. Camera (except for Business/security use)
  f. Set Top Box
  g. Electronic dictionary
  h. Digital audio equipment

  • This catalog is for reference only and not an official product specification document, therefore, please review and approve our official product specification before ordering this product.
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Important notice

PLEASE READ THIS NOTICE BEFORE USING OUR PRODUCTS.

Please make sure that your product has been evaluated and confirmed from the aspect of the fitness for the specifications of our product when our product is mounted to your product.

All the items and parameters in this product specification/datasheet/catalog have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment specified in this specification. You are requested not to use our product deviating from the condition and the environment specified in this specification.

Please note that the only warranty that we provide regarding the products is its conformance to the specifications provided herein. Accordingly, we shall not be responsible for any defects in products or equipment incorporating such products, which are caused under the conditions other than those specified in this specification.

WE HEREBY DISCLAIMS ALL OTHER WARRANTIES REGARDING THE PRODUCTS, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, THAT THEY ARE DEFECT-FREE, OR AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS.

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- Aircraft equipment.
- Aerospace equipment
- Undersea equipment.
- Power plant control equipment - Medical equipment.
- Transportation equipment (vehicles, trains, ships, elevator, etc.).
- Traffic signal equipment.
- Disaster prevention / crime prevention equipment.
- Burning / explosion control equipment
- Application of similar complexity and/or reliability requirements to the applications listed in the above.

We expressly prohibit you from analyzing, breaking, Reverse-Engineering, remodeling altering, and reproducing our product. Our product cannot be used for the product which is prohibited from being manufactured, used, and sold by the regulations and laws in the world.

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Please do not use our products, our technical information and other data provided by us for the purpose of developing of mass-destruction weapons and the purpose of military use.
Moreover, you must comply with "foreign exchange and foreign trade law", the "U.S. export administration regulations", etc.

Please note that we may discontinue the manufacture of our products, due to reasons such as end of supply of materials and/or components from our suppliers.
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Customer acknowledges that Murata will, if requested by you, conduct a failure analysis for defect or alleged defect of Products only at the level required for consumer grade Products, and thus such analysis may not always be available or be in accordance with your request (for example, in cases where the defect was caused by components in Products supplied to Murata from a third party).

The product shall not be used in any other application/model than that of claimed to Murata.

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  • deviation or lapse in function of engineering sample,
  • improper use of engineering samples.
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