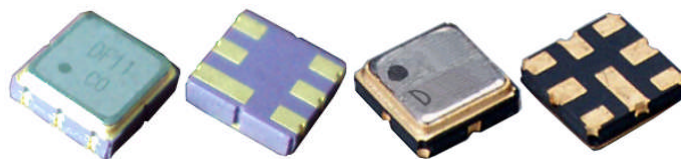


SAW Resonators/Filter

SF-3838C SF-3838D

Features

- ◆RoHS Compliant
- ◆SMD type



Maximum Rating

Item	Value
DC Voltage $V_{DC}$	10V
AC Voltage $V_{PP}$	10V (50Hz/60Hz)
Operation Temperature	-40°C to +85°C
Storage Temperature	-45°C to +90°C
RF Power Dissipation	0dBm

Electronic Characteristics

Item	Specifications
Nominal Frequency Range	243.95MHz to 959.500MHz
Tolerance	±75KHz

Dimensions(Unit: mm)

 <table border="1"> <thead> <tr> <th>Pin No.</th><th>Function</th></tr> </thead> <tbody> <tr> <td>Pin 2</td><td>Input</td></tr> <tr> <td>Pin 5</td><td>Output</td></tr> <tr> <td>Other</td><td>Ground</td></tr> </tbody> </table> <p>(SF-3838C)</p>	Pin No.	Function	Pin 2	Input	Pin 5	Output	Other	Ground	 <table border="1"> <thead> <tr> <th>Pin No.</th><th>Function</th></tr> </thead> <tbody> <tr> <td>Pin 1</td><td>Input</td></tr> <tr> <td>Pin 5</td><td>Output</td></tr> <tr> <td>Other</td><td>Ground</td></tr> </tbody> </table> <p>(SF-3838D)</p>	Pin No.	Function	Pin 1	Input	Pin 5	Output	Other	Ground
Pin No.	Function																
Pin 2	Input																
Pin 5	Output																
Other	Ground																
Pin No.	Function																
Pin 1	Input																
Pin 5	Output																
Other	Ground																

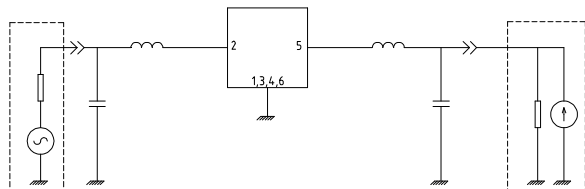
Frequency Characteristics

 <p>(SF-3838C)</p>	 <p>(SF-3838D)</p>
-----------------------	-----------------------

SAW Resonators/Filter

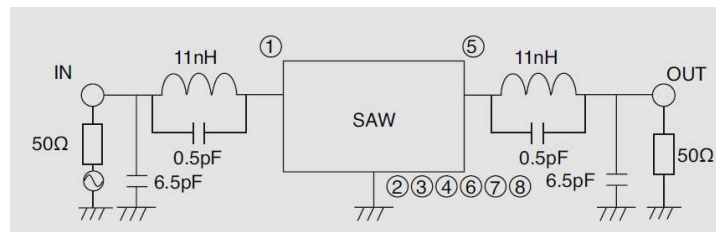
SF-3838C SF-3838D

Test Circuit



(SF-3838C)

Note: Reference temperature shall be  $25 \pm 2^\circ\text{C}$ . However, the measurement may be carried out at  $5^\circ\text{C}$  to  $35^\circ\text{C}$  unless there is a dispute



(SF-3838D)

Note: Reference temperature shall be  $25 \pm 2^\circ\text{C}$ . However, the measurement may be carried out at  $5^\circ\text{C}$  to  $35^\circ\text{C}$  unless there is a dispute

Reliability

Mechanical Shock	The components shall remain within the electrical specifications after 1000 shocks, acceleration $392 \text{ m/s}^2$ , duration 6 milliseconds.
Vibration Fatigue	The components shall remain within the electrical specifications after loaded vibration at 20 Hz, amplitude 1.5mm, for 2 hours.
Terminal Strength	The components shall remain within the electrical specifications after pulled 2 kgs weight for 10 seconds towards an axis of each terminal.
High Temperature Storage	The components shall remain within the electrical specifications after being kept at the $85^\circ\text{C} \pm 2^\circ\text{C}$ for 48 hours, then kept at room temperature for 2 hours.
Low Temperature Storage	The components shall remain within the electrical specifications after being kept at the $-40^\circ\text{C} \pm 2^\circ\text{C}$ for 48 hours, then kept at room temperature for 2 hours.
Temperature Cycle	The components shall remain within the electrical specifications after 5 cycles of high and low temperature testing (one cycle: $80^\circ\text{C}$ for 30 minutes $\rightarrow 25^\circ\text{C}$ for 5 minutes $\rightarrow 25^\circ\text{C}$ for 30 minutes) then kept at room temperature for 2 hours.
Solder-heat Resistance	The components shall remain within the electrical specifications after dipped in the solder at $260^\circ\text{C}$ for $10 \pm 1$ seconds, then kept at room temperature for 2 hours. (Terminal must be dipped leaving 1.5 mm from the case).
Solderability	Solderability of terminal shall be kept at more than 80% after dipped in the solder flux at $230^\circ\text{C} \pm 5^\circ\text{C}$ for $5 \pm 1$ seconds.

Remarks

Static voltage	Static voltage between signal load & ground may cause deterioration & destruction of the component. Please avoid static voltage.
Ultrasonic cleaning	Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning.
Soldering	Only leads of component may be soldered. Please avoid soldering another part of component.

