



SAW Components Data Sheet CQTSF2080M00.00

Customer's Approval Certificate	
Complies with Directive 2002/95/EC (RoHS)	
Please return this Page Via email as a certification of Your approval	
Checked & Approval by:	Date:

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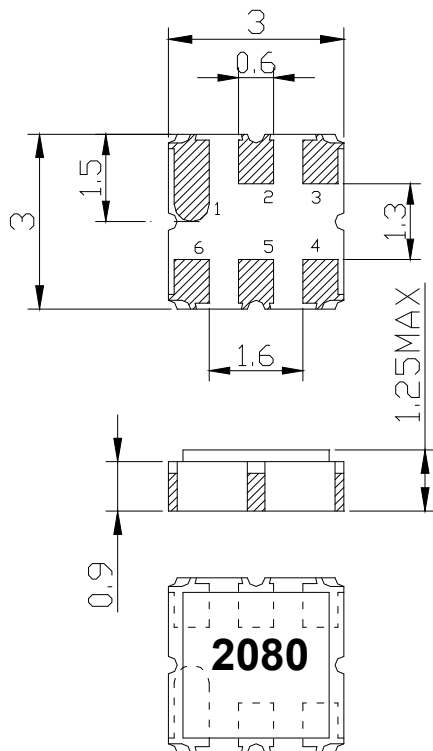
Application

- Low-loss SAW component
- Low amplitude ripple
- Sharp rejections at both out-bands
- Usable passband 40.0 MHz

Feature

- Ceramic Package for **Surface Mounted Technology (SMT)**
- **RoHS** compatible
- Package size 3.00x3.00x1.25mm³
- Package Code DCC6C
- **Electrostatic Sensitive Device(ESD)**

1. Package Dimensions (QCC8D)



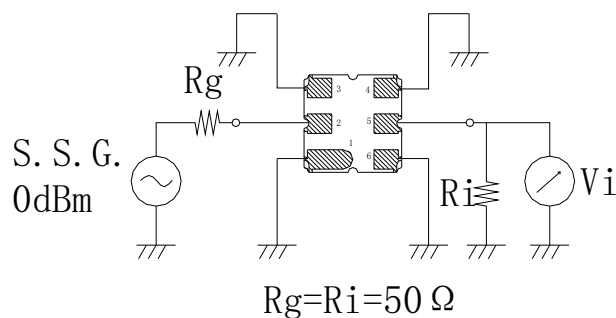
Pin Configuration

Pin No.	Description
2	Input
5	Output
1,3,4,6	Case Ground

Marking Description

2080	Part Number
●	Pin 1

Test Circuit (Bottom View)



Performance
Maximum Rating

Item		Value	Unit
DC Voltage	V _{DC}	3	V
Operation Temperature	T	-40 ~ +85	°C
Storage Temperature	T _{stg}	-55 ~ +125	°C
RF Power Dissipation	P	15	dBm

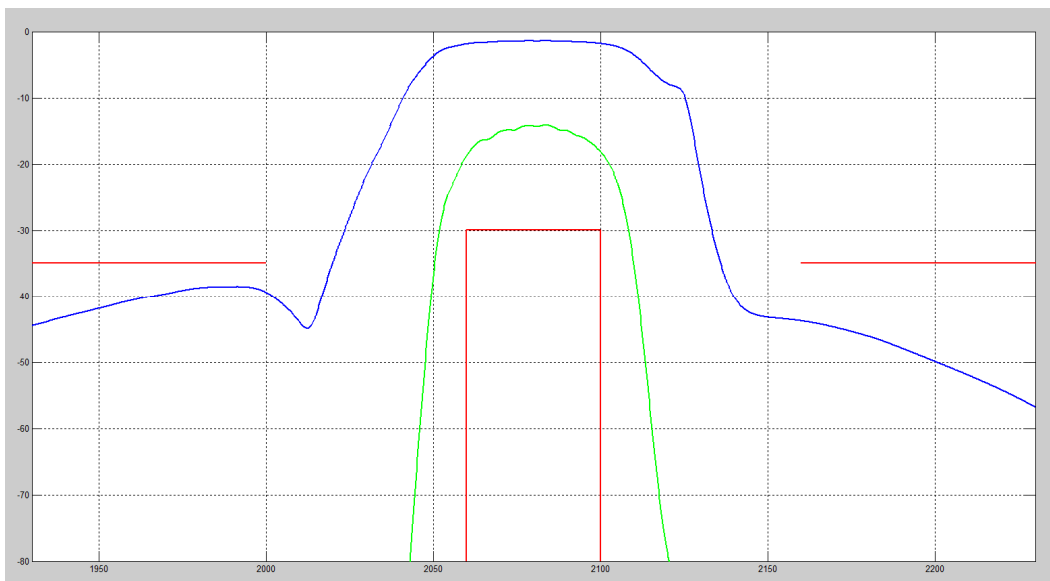
Electronic Characteristics

Test Temperature: 25°C±2°C
Terminating source impedance: 50Ω
Terminating load impedance: 50Ω

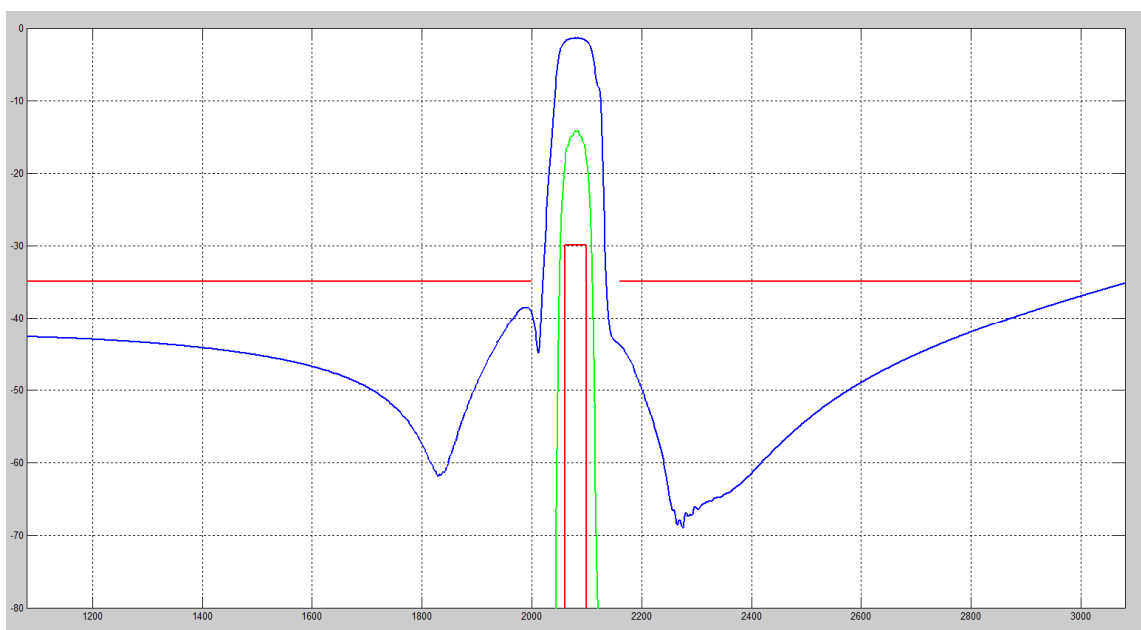
Item		Minimum	Typical	Maximum	Unit
Center Frequency	fc		2080		MHz
Insertion Loss(min)	IL		1.6	2.5	dB
Insertion Loss 2060.00 – 2100.00MHz	IL		2.5	3.0	dB
Amplitude Ripple (p-p) 2060.00 – 2100.00MHz	Δα		0.5	1.5	dB
Group Delay Ripple 2060.00 – 2100.00MHz	GDR		10.0	30.0	ns
Absolute Attenuation	α				
DC -2000.00MHz		33.0	38.0		dB
2160.00- 2500.00MHz		35.0	45.0		dB
2500.00 - 2800.00MHz		33.0	36.0		dB
Input VSWR 2060.00 – 2100.00MHz			1.7:1	2.3:1	/
Output VSWR 2060.00 – 2100.00MHz			1.7:1	2.3:1	/

Frequency Characteristics

Frequency Response



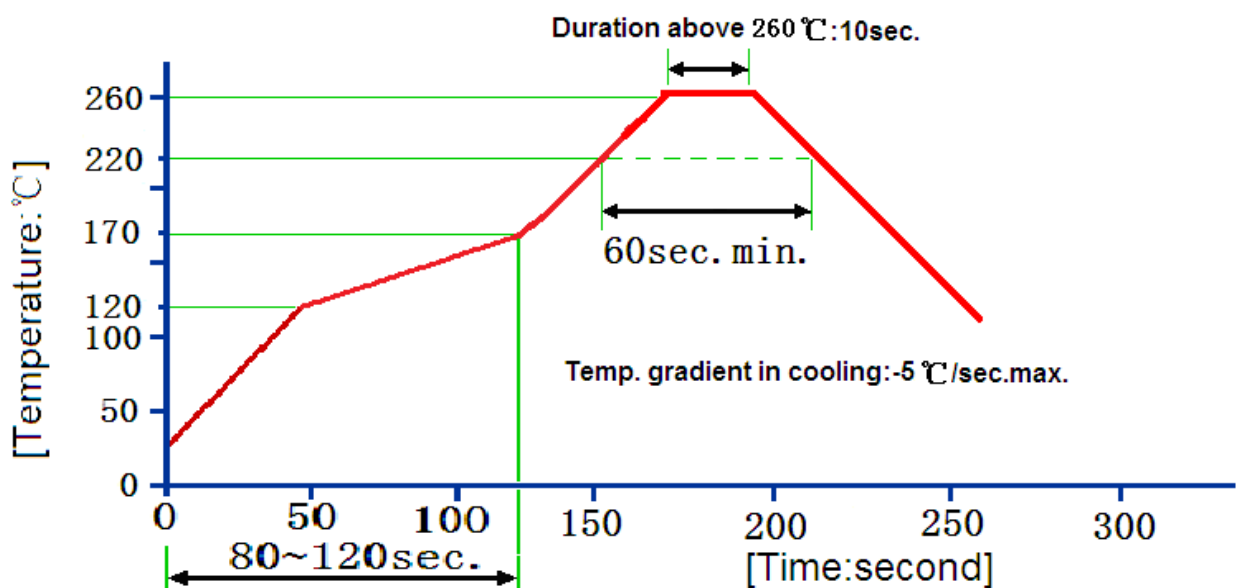
Frequency Response (wideband)



Reliability (The SAW components shall remain electrical performance after tests)

No.	Test item	Test condition
1	Temperature Storage	(1) Temperature: $85^{\circ}\text{C}\pm 2^{\circ}\text{C}$, Duration: 250h , Recovery time: $2\text{h}\pm 0.5\text{h}$ (2) Temperature: $-55^{\circ}\text{C}\pm 3^{\circ}\text{C}$, Duration: 250h .Recovery time: $2\text{h}\pm 0.5\text{h}$
2	Humidity Test	Conditions: $60^{\circ}\text{C}\pm 2^{\circ}\text{C}$, 90~95% RH Duration: 250h
3	Thermal Shock	Heat cycle conditions: $\text{TA}=-55^{\circ}\text{C}\pm 3^{\circ}\text{C}$, $\text{TB}=85^{\circ}\text{C}\pm 2^{\circ}\text{C}$, $t_1=t_2=30\text{min}$, Switch time: $\leq 3\text{min}$, Cycle time: 100 times, Recovery time: $2\text{h}\pm 0.5\text{h}$.
4	Vibration Fatigue	Frequency of vibration: 10~55Hz Amplitude:1.5mm Directions: X,Y and Z Duration: 2h
5	Drop Test	Cycle time: 10 times Height: 1.0m
6	Solder Ability Test	Temperature: $245^{\circ}\text{C}\pm 5^{\circ}\text{C}$ Duration: 3.0s--5.0s Depth: DIP--2/3 , SMD--1/5
7	Resistance to Soldering Heat	(1)Thickness of PCB:1mm , Solder condition: $260^{\circ}\text{C}\pm 5^{\circ}\text{C}$, Duration: $10\pm 1\text{s}$ (2)Temperature of Soldering Iron: $350^{\circ}\text{C}\pm 10^{\circ}\text{C}$, Duration: 3~4s ,

Recommended Reflow Soldering Diagram



Reflow cycles: 3 cycles max.