




SPECIFICATION SHEET

SPECIFICATION SHEET NO.	Q1019-SA340M0000S001
DATE	Oct. 19, 2023
REVISION	A2
DESCRIPTION	SMD SAW Resonator 5050 Type L5.0*W5.0*H1.35mm 8 Pads S3 Series 340.000KHz, Insertion Loss: 2.5 dB Max. Tolerance: +/-75KHz Operating Temp. Range -40°C ~+85°C Reflow Profile Condition 260 °C Max. Tape/Reel, RoHS/RoHS III compliant
CUSTOMER	
CUSTOMER PART NUMBER	
CROSS REF. PART NUMBER	
ORIGINAL PART NUMBER	TGS SR 340.0MA S3 TLF
PART CODE	SA340M0000S001

VENDOR APPROVE			
Issued/Checked/Approved			
DATE: Oct. 19, 2023			

CUSTOMER APPROVE	
DATE:	

10/19/2023

SMD SAW RESONATOR 5050 TYPE S3 SERIES

MAIN FEATURE

- SMD SAW Resonator 5050 Type 8 Pads
- Dimension L5.0*W5.0*H1.35mm
- Reflow Profile Condition 260 °C Max.
- Cross more competitors part
- RoHS/RoHS III compliant



APPLICATION

- Bluetooth, wireless communication set
- Communication Electronics

PART CODE GUIDE

RFQ

[Request For Quotation](#)

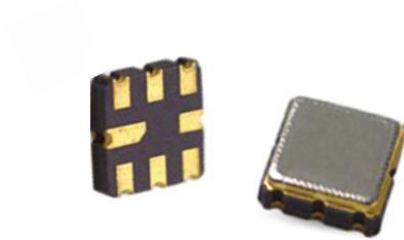
SA	340M0000	S	001
1	2	3	4

- 1) SA: Part family Code for SMD SAW Resonator 5050 Type L5.0*W5.0*H1.35mm 8 Pads, S3 Series
- 2) 340M0000: Frequency range code for 340.000MHz
- 3) S: SMD type, Package Tape/Reel, 1000pcs/Reel
- 4) 001: Specification code for original part No.: **TGS SR 340.0MA S3 TLF**

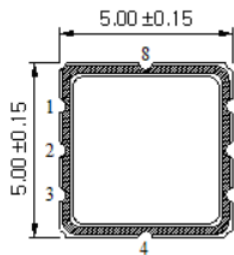
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DIMENSION (Unit: mm)

Image for reference

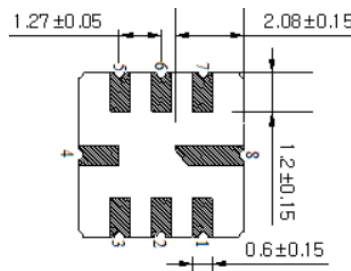


S3



Marking:

Standard + ● : Pin 1

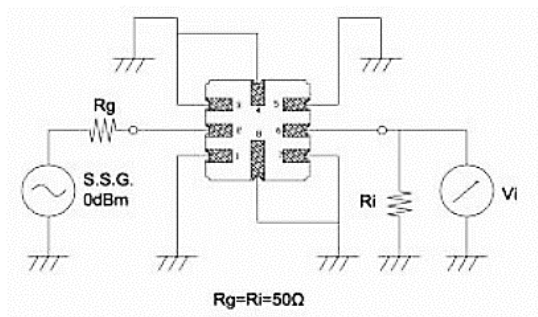


Connection

- Pin 2: Input
- Pin 6: Output
- Other pins: Ground



Measuring Circuit



Note:

- Test Temperature: 25 °C±2 °C
- Terminating Source Impedance: 50Ω
- Termination Load Impedance: 50Ω

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ELECTRICAL PARAMETERS

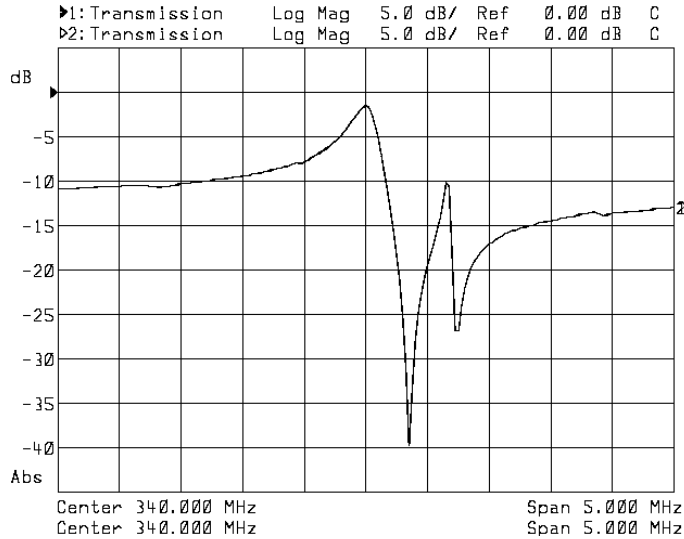
Parameter		Part No. Symbol	Units	Value		
				Min.	Typical	Max.
Original Manufacturer		TGS	TGS Crystals			
Holder Type		SR	SAW Resonator			
Frequency Range (f0)		340.0M	MHz	340.0000		
Frequency Tolerance		A	KHz	-75		+75
Operation Temperature			°C	-40		+85
Storage Temperature			°C	-40		+85
DC Voltage (between any Terminals)			V		10.0	
RF Power (in BW)			dBm		0	
ESD Voltage (HB)			V		400	
Insertion Loss			dB		1.5	2.5
Quality Factor (Q)	Unload				11000	
	50 Ω Loaded				2000	
Temperature Stability	Turnover Temperature		°C		+39	
	Frequency Temperature Coefficient	ppm/°C		0.032		
Aging		ppm/Year		≤±10		
DC Insulation Resistance		MΩ	1.0			
Transduce Static Capacitance		pF		2.9		
Hold Type		S3		5050 Type, 8 Pads L5.0*W5.0*H1.35mm		
Other	Package	T	Tape/Reel, 1000pcs/Reel			
	RoHS Status	LF	RoHS III compliant			
	Add Value		Blank: N/A			
	Internal Control Code		Blank: N/A			

Note:

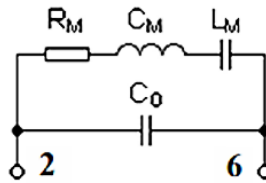
Original Part Number: TGS SR 340.0MA S3 TLF

SMD SAW RESONATOR 5050 TYPE S3 SERIES

FREQUENCY RESPONSE

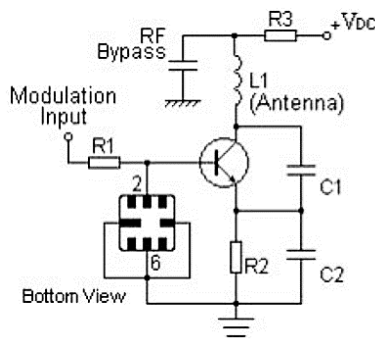


EQUIVALENT LC MODEL

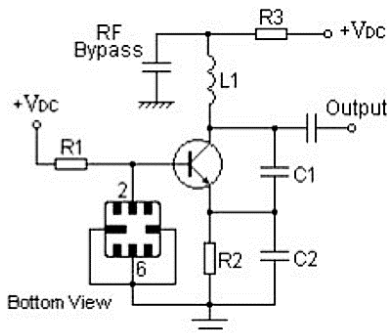


PLICTYPICAL APATION CIRCUITS

Typical Low-power Transmitter Application



Typical Local Oscillator Application

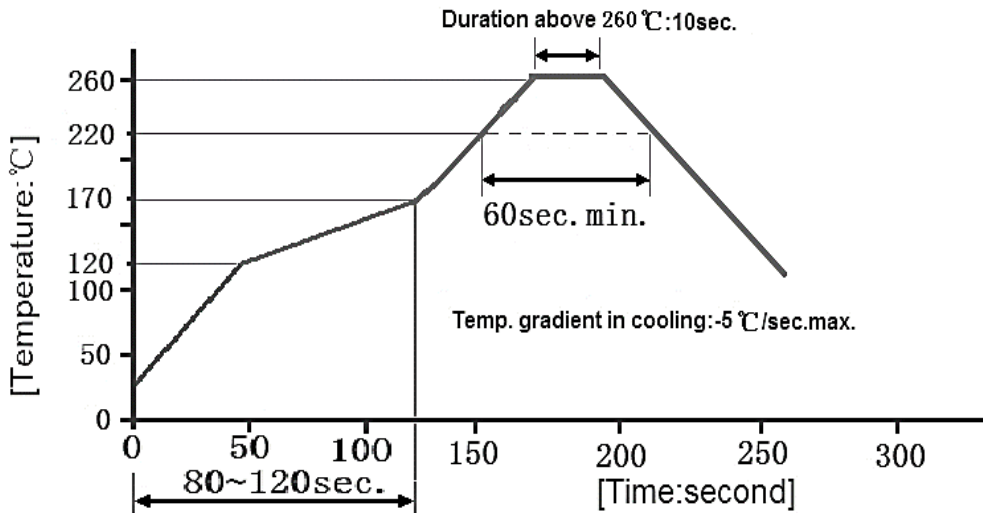


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RELIABILITY

Test Items	Test Method And Conditions	Requirement
Temperature Storage	(1) Temperature: 85°C±2°C , Duration: 250h , Recovery time: 2h±0.5h	It shall remain electrical performance after tests
	(2) Temperature: -55°C±3°C , Duration: 250h ,Recovery time: 2h±0.5h	
Humidity Test	Conditions: 60°C±2°C , 90~95% RH Duration: 250h	
Thermal Shock	Heat cycle conditions: TA=-55°C±3°C, TB=85°C±2°C, t1=t2=30min, Switch time: ≤3min, Cycle time: 100 times, Recovery time: 2h±0.5h.	
Vibration Fatigue	Frequency of vibration: 10~55Hz Amplitude:1.5mm Directions: X,Y and Z Duration: 2h	
Drop Test	Cycle time: 10 times Height: 1.0m	
Solderability	Temperature: 245°C±5°C Duration: 3.0s--5.0s Depth: DIP--2/3 , SMD--1/5	
Resistance to Soldering Heat	(1)Thickness of PCB:1mm , Solder condition: 260°C±5°C , Duration: 10±1s	
	(2)Temperature of Soldering Iron: 350°C±10°C , Duration: 3~4s , Recovery time : 2 ± 0.5h	

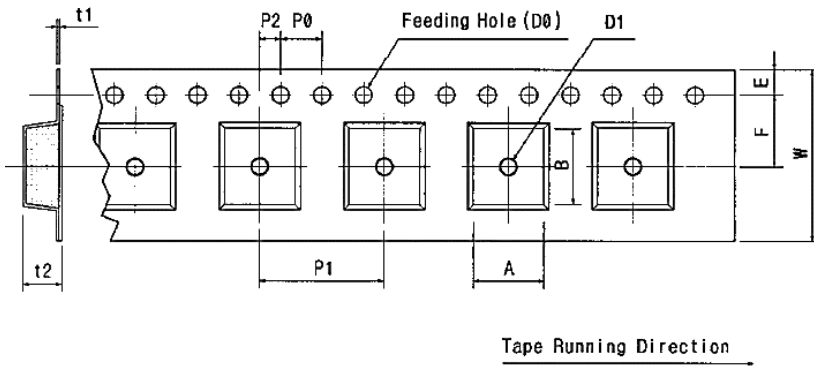
SUGGESTED REFLOW PROFILE (For Reference Only)



Reflow cycles: 3 cycles max.

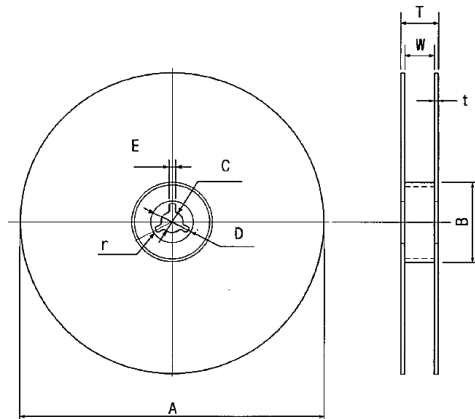
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REEL DIMENSION (Unit: mm, 1000pcs/Reel)



Code	Dimension
W	12.0+/-0.30
F	5.50+/-0.05
E	1.75+/-0.10
P 0	4.00+/-0.10
P 1	8.00+/-0.10
P 2	2.00+/-0.05
D 0	$\varnothing 1.5+/-0.10$
D 1	$\varnothing 1.0+/-0.25$
t 1	0.30+/-0.05
t 2	2.10+/-0.10
A	6.40+/-0.10
B	5.20+/-0.10

TAPE DIMENSION (Unit: mm)



Code	Dimension
A	$\varnothing 330+/-1.0$
B	$\varnothing 100+/-0.5$
C	$\varnothing 13.0+/-0.5$
D	$\varnothing 21+/-0.8$
E	2.00+/-0.5
W	13.0+/-0.30
t	3.00 Max.
r	1.00 Max.

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CAUTION

1. As a result of the particularity of inner structure of SAW products, it easy to be breakdown by electrostatic, so we should pay attention to ESD protect in the test.
2. Static voltage between signal load and ground may cause deterioration and destruction of the component. Please avoid static voltage.
3. Ultrasonic cleaning may cause deterioration and destruction of the component. Please avoid ultrasonic cleaning.
4. Only leads of component may be soldered. Please avoid soldering another part of component.
5. There is a close relationship between the device's performance and matching network. The specifications of this device are based on the test circuit shown above. L and C values may change depending on board layout. Values shown are intended as a guide only.
6. The temperature of manual welding should not exceed 300 °C.
7. The specifications of this device are based on the test circuit shown above and subject to change or obsolescence without notice.
8. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.
9. Our liability is only assumed for the Surface Acoustic Wave (SAW) component(s) perse, not for applications, processes and circuits implemented within components or assemblies.
10. For questions on technology, prices and delivery, please contact our sales offices or e-mail: sales@NextGenComponent.com.

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