

## 1. Scope.

This specification applied to SV1212-1050R5V300M

## 2. Ratings

	ITEM	SYMBOL	RATING	UNIT
1	Supply Voltage	Vcc	5.0±0.25	V
2	Tuning Voltage	Vt	1.0 ~ 8.0	V
3	Operating Temperature	Top	-40 ~ +85	°C
4	Storage Temperature	Tstg	-50 ~ +100	°C
5	Storage Humidity	Hstg	0 ~ 95%	%

## 3. Electrical Characteristics

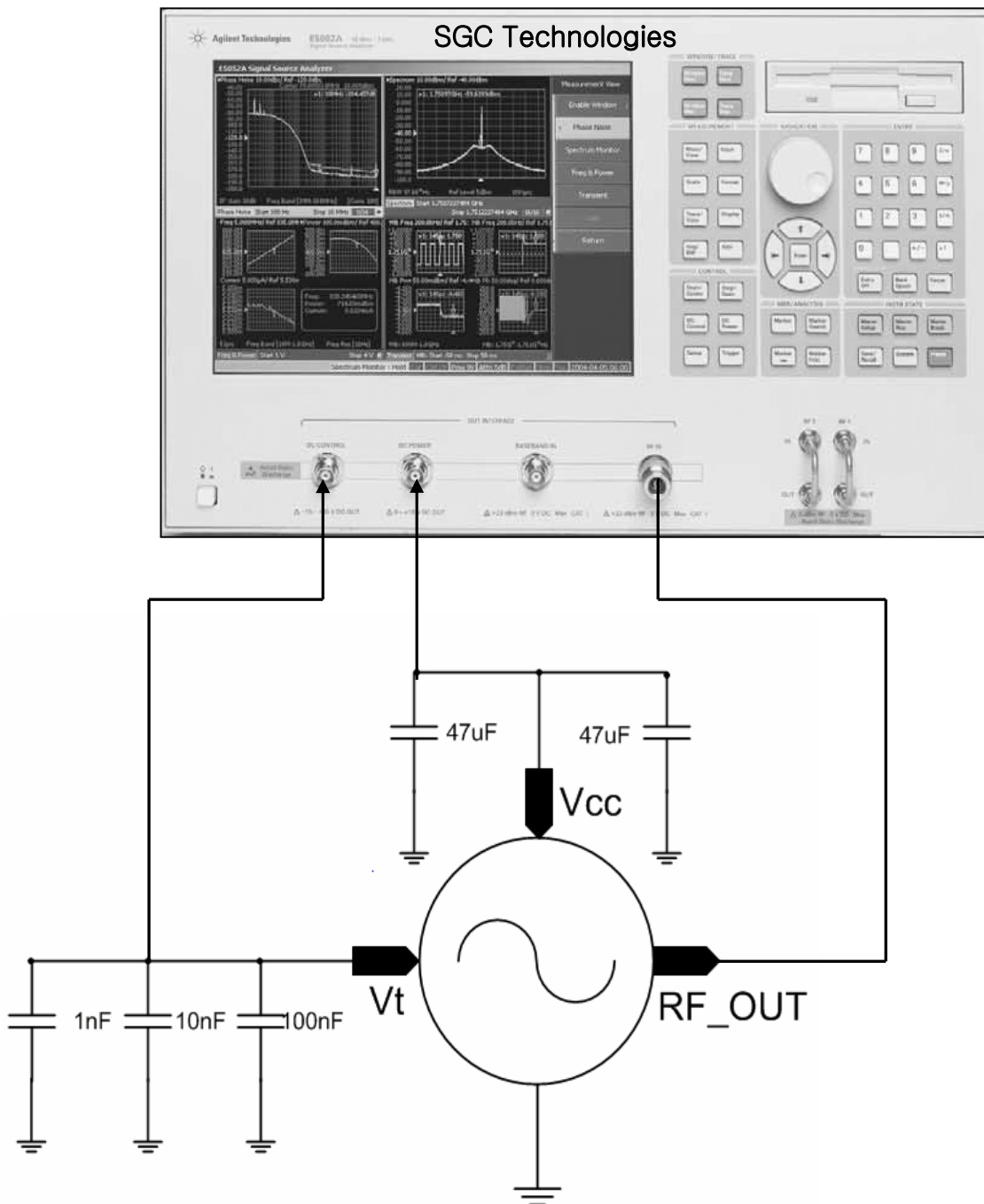
(Over output frequency range, TA -40 to +85°C, Vcc=5.0V, Output load 50Ω, Unless otherwise stated)

PARAMETER	SPEC.			UNIT	Test conditions
	Min	Typ	Max		
Supply Voltage		5.0		V	DC Voltage
Oscillator Frequency Range			900	MHz	Vcc =5.0 V, Vt = 1.0V
	1200				Vcc = 5.0V, Vt = 8.0V
Supply Current			30	mA	Vcc = 5.0V, Vt = 4.5V
Output Power	7	10	13	dBm	Vcc = 5.0V, Vt = 1.0V ~8.0V
SSB Phase Noise (C/N)		-75	-70	dBc/Hz	1kHz offset, Vcc=5.0V, Vt=4.5 V
		-105	-100		10kHz offset, Vcc=5.0V, Vt=4.5 V
		-125	-120		100kHz offset, Vcc=5.0V, Vt=4.5 V
Harmonic Suppression(2 <sup>nd</sup> )		-22	-10	dBc	Vcc =5.0V, Vt = 4.5 V
Tuning Sensitivity	43			MHz/V	Vt = 1.0V ~ 8.0 V
Frequency Pulling		< 15		MHz	Vcc = 5.0V, Vt = 4.5 V VSWR = 1.5 : 1 All phase
Frequency Pushing		< 5		MHz	Vcc = 5.0V ±0.25V, Vt= 4.5 V
Input Capacitance		150		pF	

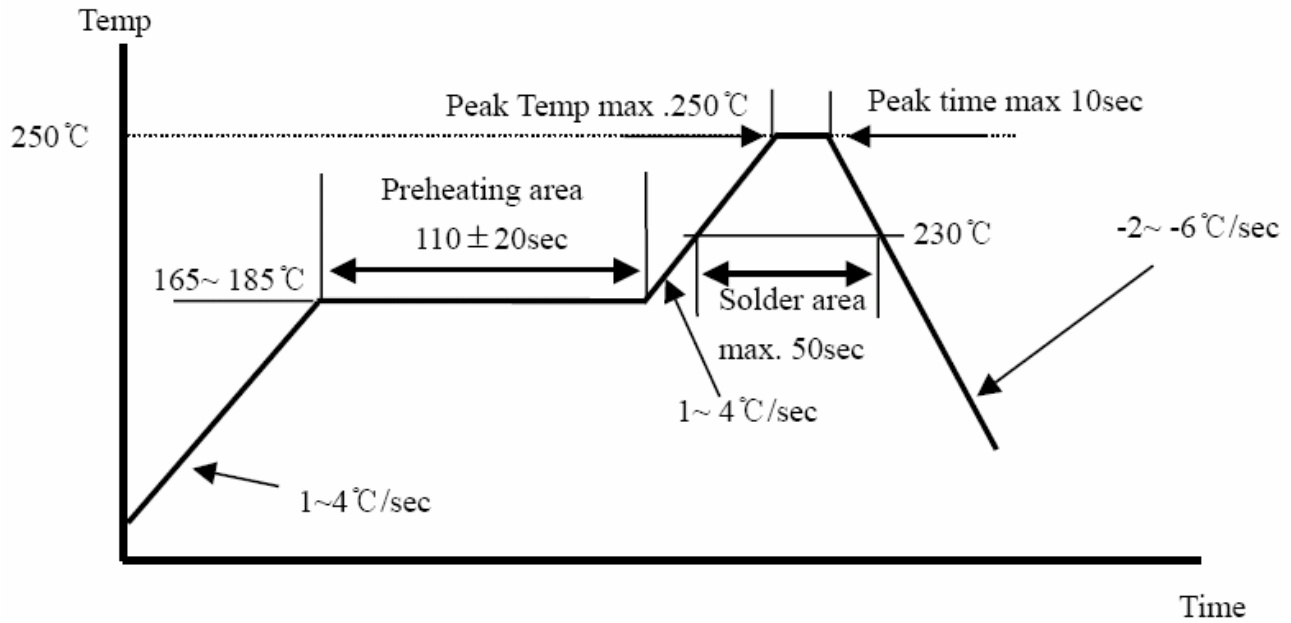
Testing temperature at 25±5°C

#### 4. Measurement Circuit

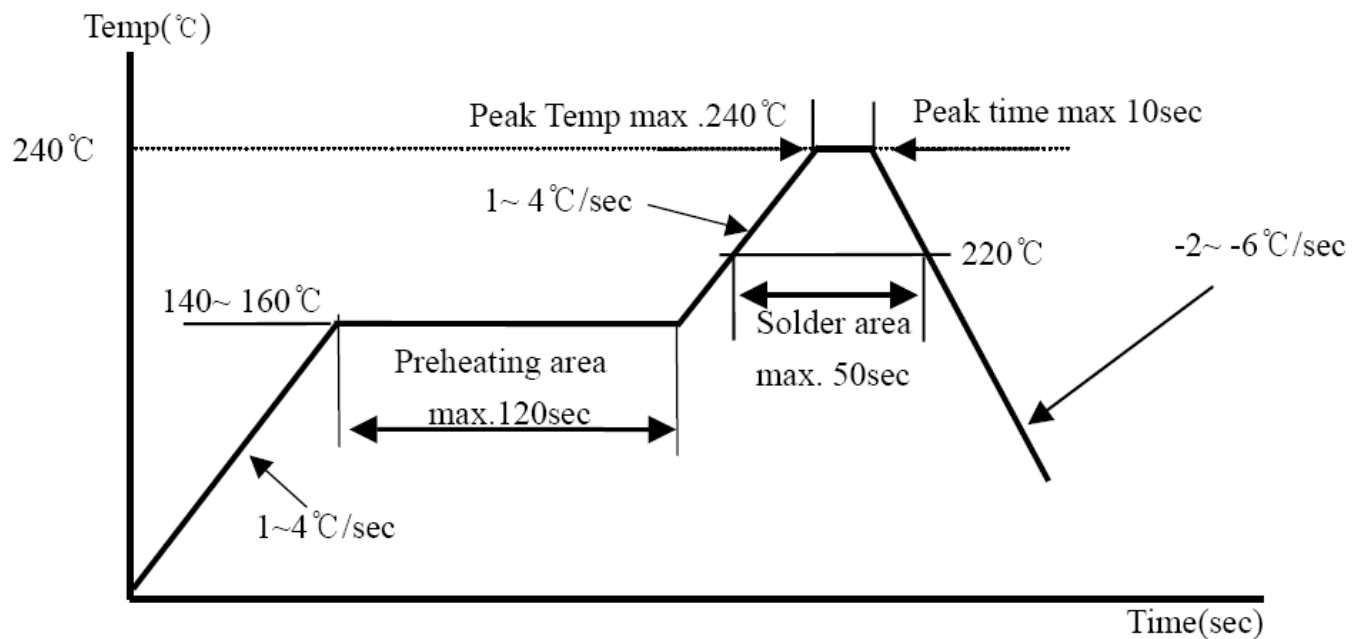
Test Equipment : Agilent E5052A or 4352B



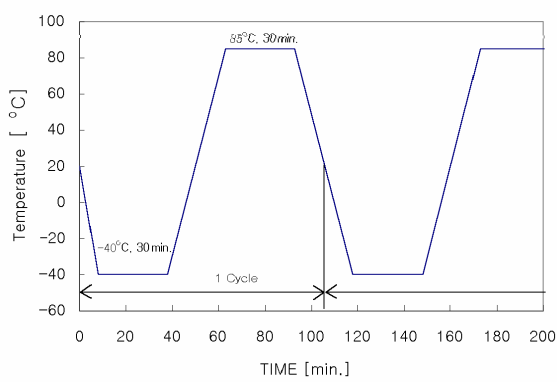
### 5. Recommendable Reflow Soldering Profile (Pb - Free)



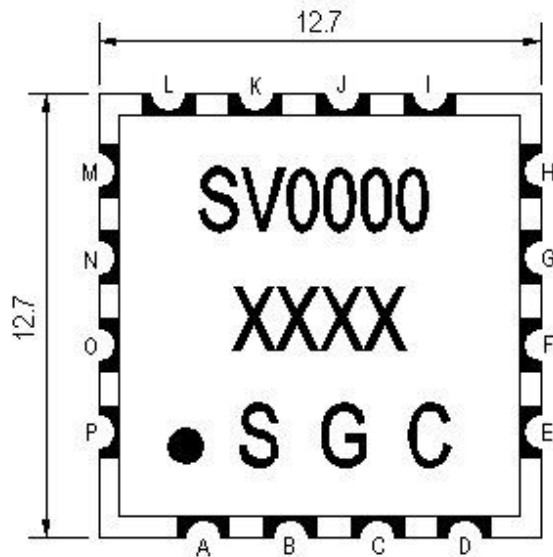
### 6. Recommendable Reflow Soldering Profile (Sn : Pb = 63:37))



## 7. Environmental Requirement

No	ITEM	Condition and Method	Evaluation
1	High Temperature Test	Temp. : +85°C ± 2°C Time : 96hrs ± 2hrs When measured after 2 to 24 hours in normal condition	It shall be satisfied electrical requirement, and not be mechanical damage.
2	Low Temperature Test	Temp. : -40°C ± 2°C Time : 96hrs ± 2hrs When measured after 2 to 24 hours in normal condition	
3	High Temperature & High Humidity	Temp. : +60°C ± 2°C Humi. : 90~95%RH Time : 72hrs ± 2hrs When measured after 2 to 24 hours in normal condition	
4	Temperature Cycle	 <p>-40°C 30min., +85°C 30min., 5 Cycle                      When measured after 2 to 24 hours in normal condition</p>	
5	Vibration Test	Freq. : 10 ~ 30Hz, Amplitude : 1.52mm Freq. : 30~60Hz, 6G Cycle : 20 min. / Cycle Position : Three perpendicular planes.	
6	Shock Test	Height : 75cm Times : 3 Method : Dropped onto wood surface	

### 8. Mechanical Characteristics



#### TITLE OF TERMINAL

A,C,D,E,F,G,H,I,K,L,M,O,P : Ground

N : Power Supply

J : Output Power

B : Control Voltage

\* Unit : mm

