

1. Scope.

This specification applied to SV1212-2114R10.5V550M

2. Ratings

	ITEM	SYMBOL	RATING	UNIT
1	Supply Voltage	Vcc	10.5±0.25	V
2	Tuning Voltage	Vt	0.5 ~ 23.5	V
3	Operating Temperature	Top	-40 ~ +85	°C
4	Storage Temperature	Tstg	-50 ~ +100	°C
5	Storage Humidity	Hstg	0 ~ 95%	%

3. Electrical Characteristics

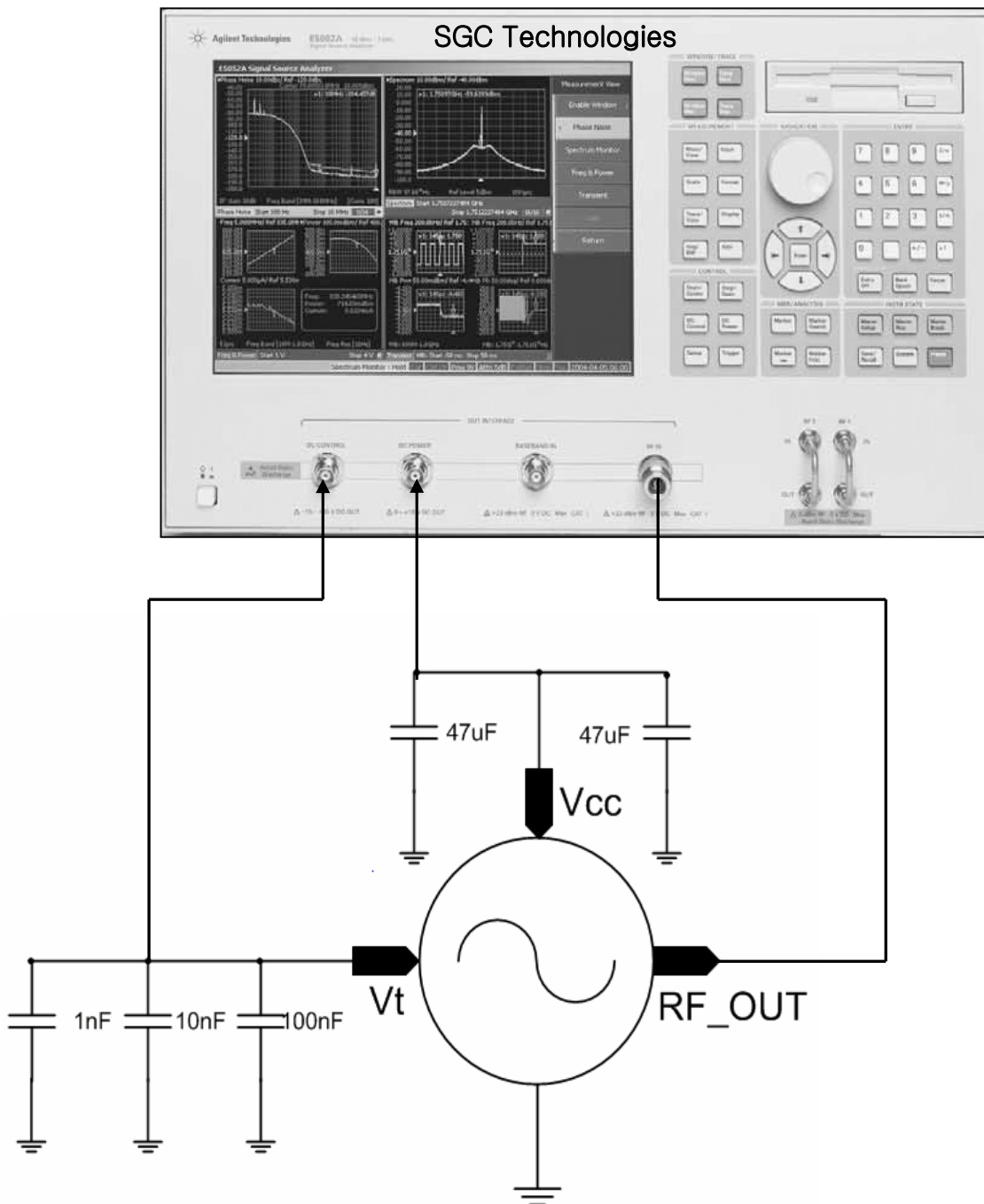
(Over output frequency range, TA -40 to +85°C, Vcc=10.5V, Output load 50Ω, Unless otherwise stated)

PARAMETER	SPEC.			UNIT	Test conditions
	Min	Typ	Max		
Supply Voltage		10.5		V	DC Voltage
Oscillator Frequency Range			1839	MHz	Vcc =10.5V, Vt = 0.5V
	2389				Vcc = 10.5V, Vt = 23.5V
Supply Current			35	mA	Vcc = 10.5V, Vt = 12.0V
Output Power	2	5	8	dBm	Vcc = 10.5V, Vt = 0.5V ~23.5V
SSB Phase Noise (C/N)		-75	-70	dBc/Hz	1kHz offset, Vcc=10.5V, Vt=12 V
		-105	-100		10kHz offset, Vcc=10.5V, Vt=12 V
		-125	-120		100kHz offset, Vcc=10.5V, Vt=12 V
Harmonic Suppression(2 nd)			-10	dBc	Vcc =10.5V, Vt = 12 V
Tuning Sensitivity	25			MHz/V	Vt = 0.5V ~ 23.5 V
Frequency Pulling	< 10			MHz	Vcc = 10.5V, Vt = 12 V VSWR = 1.5 : 1 All phase
Frequency Pushing	< 5			MHz	Vcc = 10.0V ±0.25V, Vt= 12 V
Input Capacitance	100			pF	

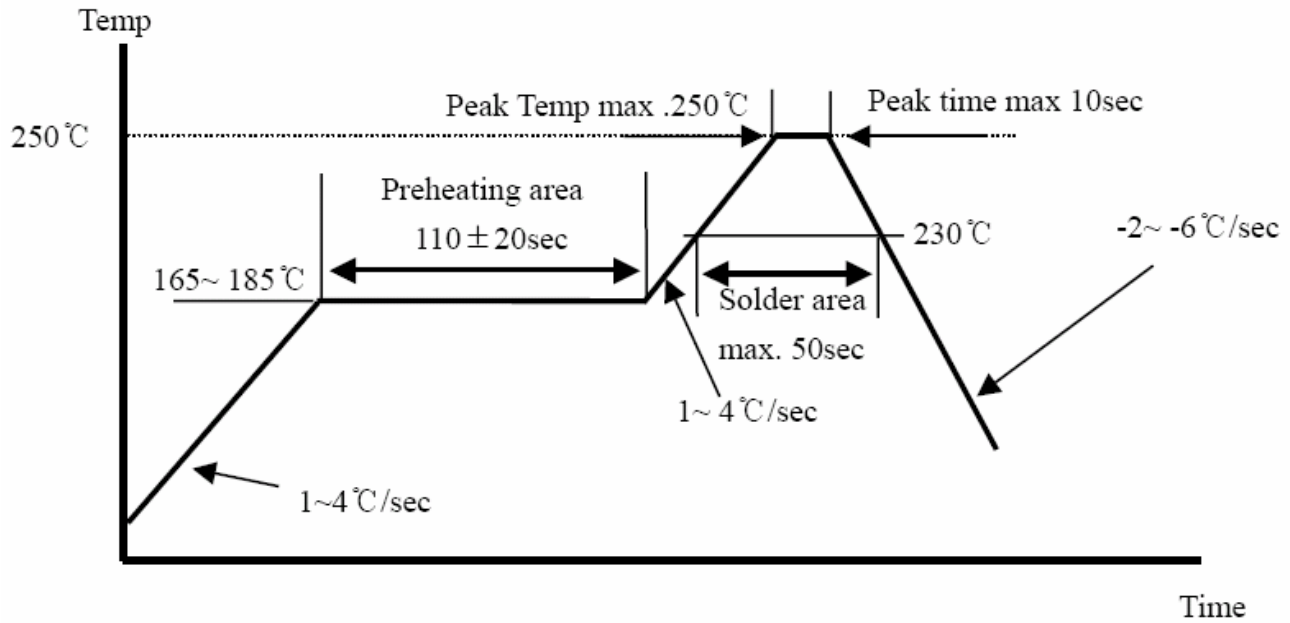
Testing temperature at 25±5°C

4. Measurement Circuit

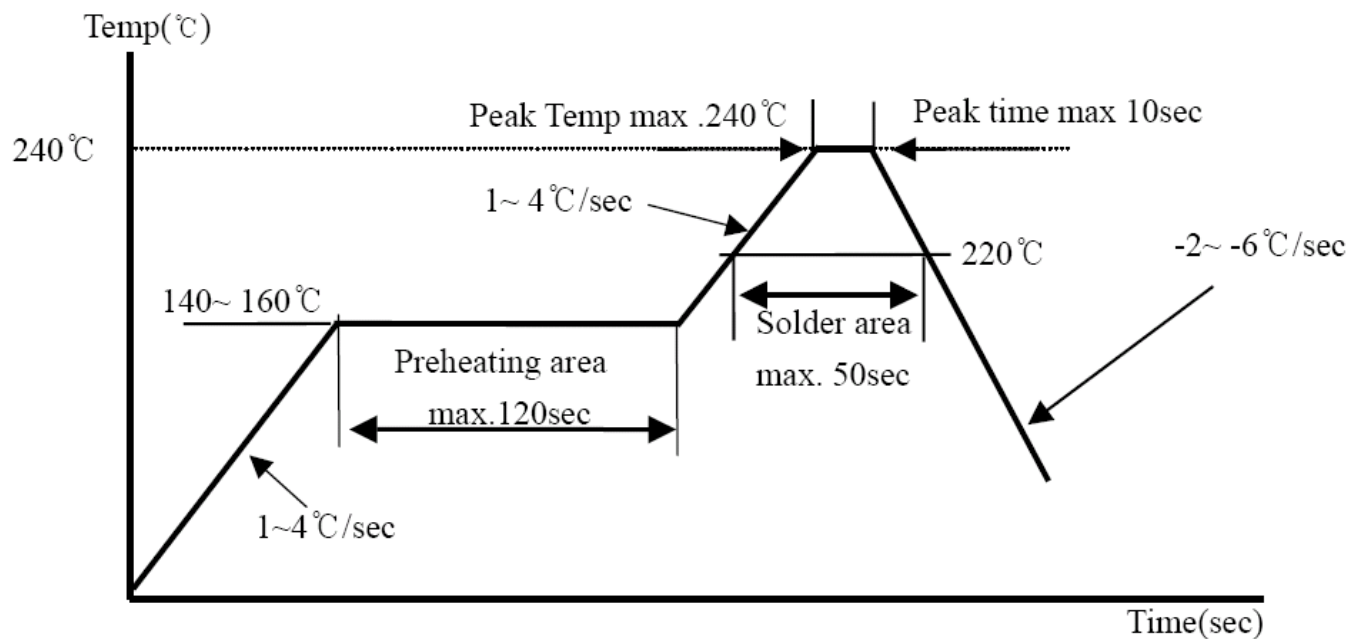
Test Equipment : Agilent E5052A or 4352B



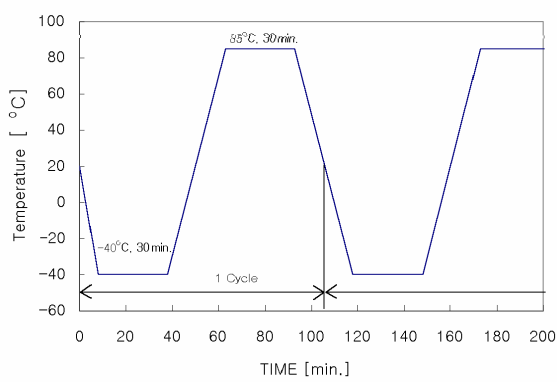
5. Recommendable Reflow Soldering Profile (Pb - Free)



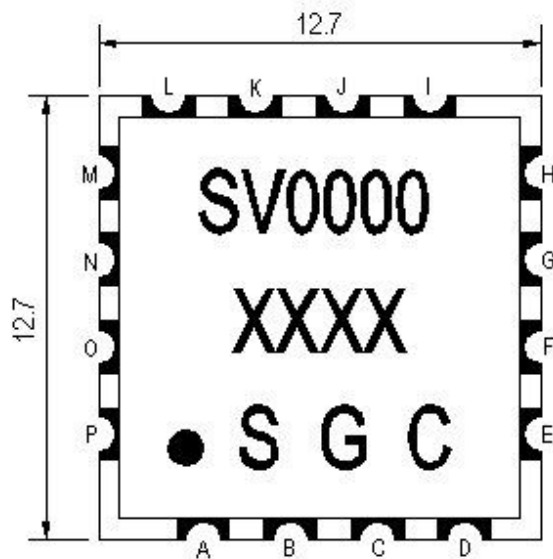
6. Recommendable Reflow Soldering Profile (Sn : Pb = 63:37))



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

