1. Scope.

This specification applied to SV1212-2810R8V10M

2. Ratings

	ITEM	SYMBOL	RATING	UNIT
1	Supply Voltage	Vcc	8±0.25	V
2	Tuning Voltage	Vt	0.5 ~ 4.5	V
3	Operating Temperature	Top	-40 ~ +85	℃
4	Storage Temperature	Tstg	-50 ~ +100	℃
5	Storage Humidity	Hstg	0 ~ 95%	%

3. Electrical Characteristics

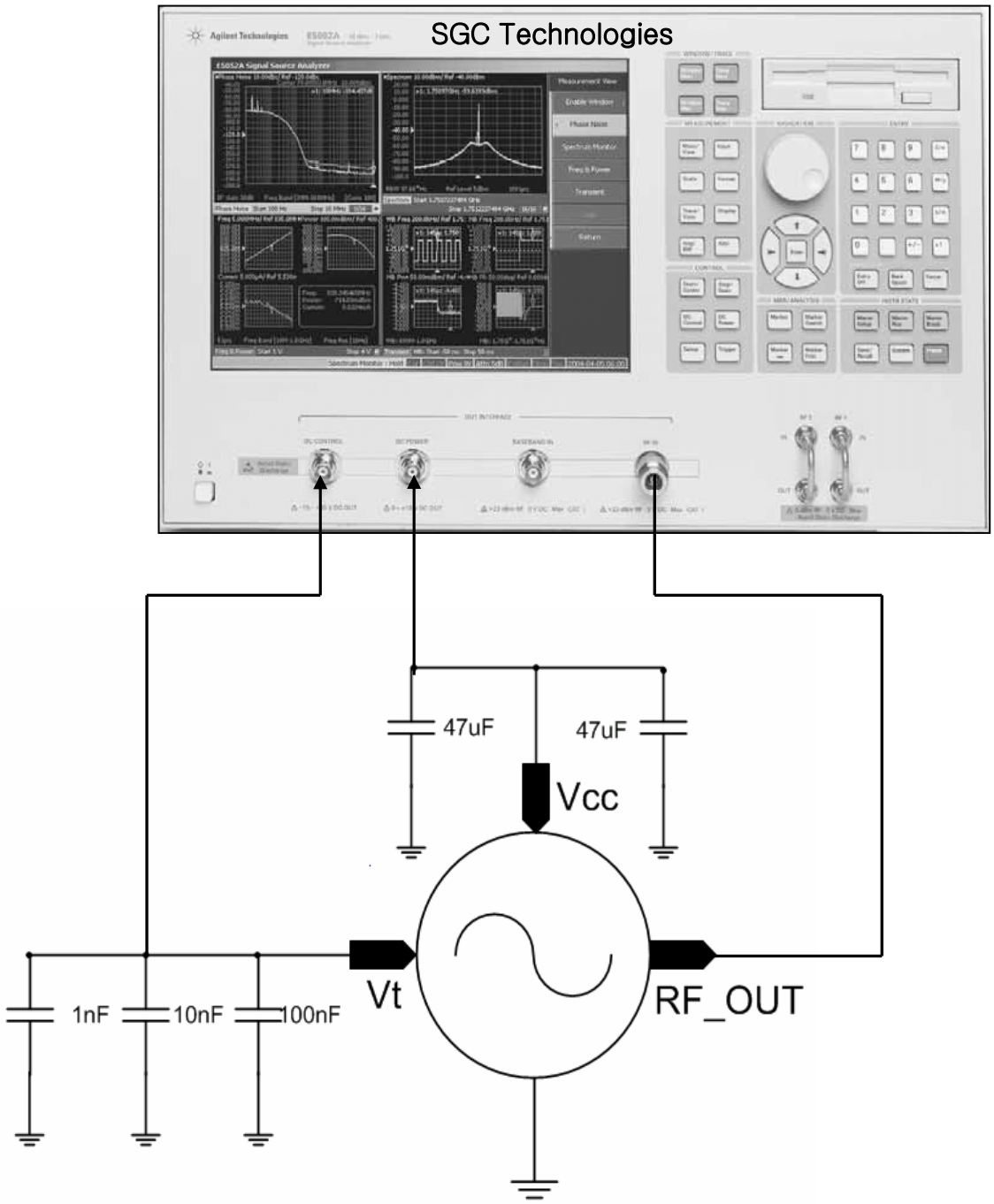
(Over output frequency range, T_A -40 to +85℃, Vcc=8.0V, Output load 50Ω, Unless otherwise stated)

PARAMETER	SPEC.			UNIT	Test conditions
	Min	Typ	Max		
Supply Voltage		8		V	DC Voltage
Oscillator Frequency Range			2805	MHz	Vcc = 8.0V, Vt = 0.5V
	2815				Vcc = 8.0V, Vt = 4.5V
Supply Current			35	mA	Vcc = 8.0V, Vt = 2.5V
Output Power	-2.5	0	2.5	dBm	Vcc = 8.0V, Vt = 0.5V ~ 4.5V
SSB Phase Noise		118	115	dBc/Hz	10㎑ offset, Vcc=8.0V, Vt =2.5V
		137	135	dBc/Hz	100㎑ offset, Vcc=8.0V, Vt =2.5V
Harmonic Suppression(2^{nd})		-17	-10	dBc	Vcc = 8.0V, Vt = 2.5V
Tuning Sensitivity	4	5.5		MHz/V	Vt = 0.5V ~ 4.5V
Frequency Pulling	< 0.5			MHz	Vcc = 8.0V, Vt = 2.5V VSWR = 1.5 : 1 All phase
Frequency Pushing	< 2			MHz	Vcc = 8.0V ±0.25V, Vt= 2.5V
Input Capacitance	15			pF	

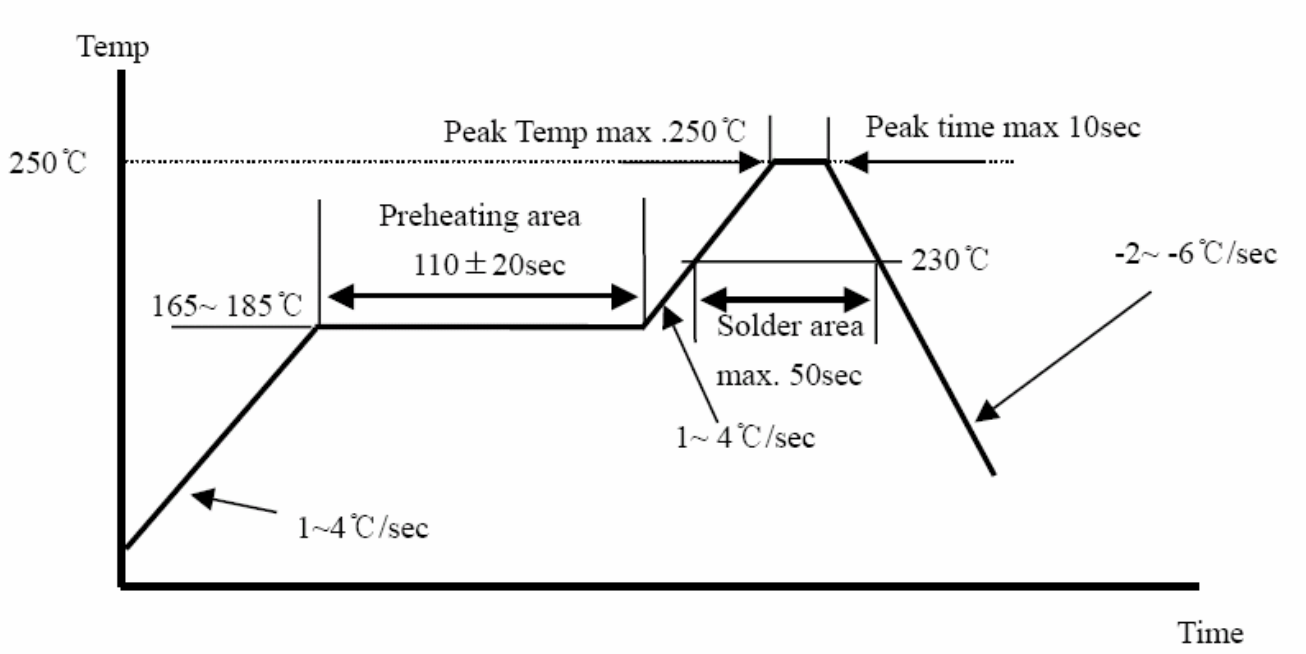
Testing temperature at 25±5℃

4. Measurement Circuit

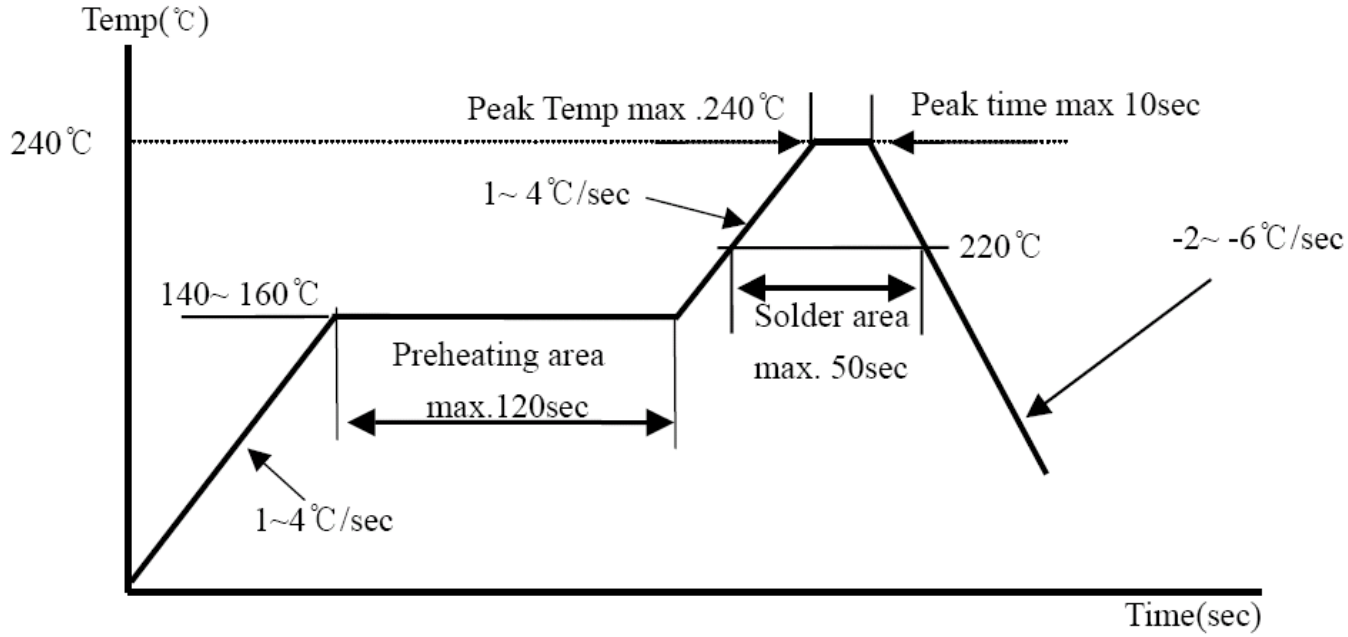
Test Equipment : Agilent E5052A or 4352B



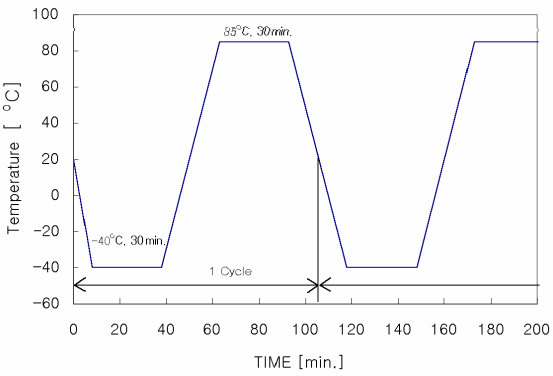
5. Recommendable Reflow Soldering Profile (Pb - Free)



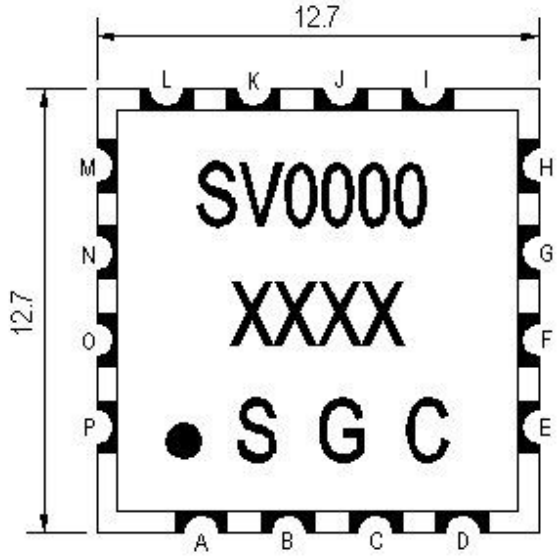
6. Recommendable Reflow Soldering Profile (Sn : Pb = 63:37)



7. Environmental Requirement

No	ITEM	Condition and Method	Evaluation
1	High Temperature Test	Temp. : +85℃ ± 2℃ 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℃ ± 2℃ Time : 96hrs ± 2hrs When measured after 2 to 24 hours in normal condition	
3	High Temperature & High Humidity	Temp. : +60℃ ± 2℃ Humi. : 90~95%RH Time : 72hrs ± 2hrs When measured after 2 to 24 hours in normal condition	
4	Temperature Cycle	 -40℃ 30min., +85℃ 30min., 5 Cycle When measured after 2 to 24 hours in normal condition	
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

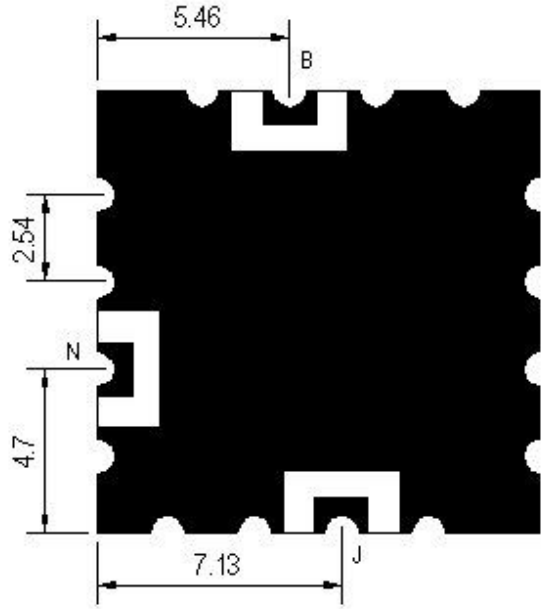
A,C,D,E,F,G,H,I,K,L,M,O,P : Ground

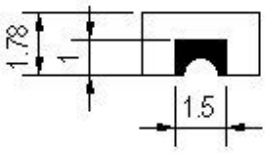
N : Power Supply

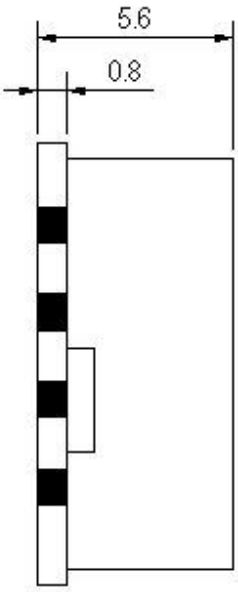
J : Output Power

B : Control Votage

* Unit : mm







9. PART MARKING

9.1 Marking

Add dot on the corner for pin 'A' identification
Supplier part number
Date code

Note : Marking shall be permanent, solvent resistant, and can withstand to the soldering process.

10. CRITICAL TO QUALITY (CTQ) PARAMETERS

SGC will check the following specific parameters during the design and manufacturing process:

- Phase noise at 10 KHz offset
- Temperature transition stability
- Tuning sensitivity
- Phase noise at 100 KHz offset

11. QUALITY ASSURANCE SYSTEM

SGC will implement and maintain a quality assurance system to ensure that operation that contribute to the design, development, production and service of material are in compliance with the ISO-9001:2000.

12. QUALITY ASSURANCE

SGC will implement and maintain the following quality Assurance requirements in Harris PPD.

- Quality of workmanship
- Serialization and lot control
- Material handling, packaging and marking
- Process controls
- Outgoing quality and reliability
- Corrective actions
- Process Controls

13. RELIABILITY

SGC will implement and maintain the following reliability requirement in Harris PPD.

- Design reliability
- Field returns tracking and FMA capabilities

14. QA Flowchart and TQM Organization and Main Tasks