

1. Scope.

This specification applied to SV1212-495R3.8V50M

2. Ratings

	ITEM	SYMBOL	RATING	UNIT
1	Supply Voltage	Vcc	3.8±0.3	V
2	Tuning Voltage	Vt	0.5 ~ 4.5	V
3	Operating Temperature	Top	-40 ~ +85	°C
4	Storage Temperature	Tstg	-50 ~ +100	°C
5	Storage Humidity	Hstg	0 ~ 95%	%

3. Electrical Characteristics

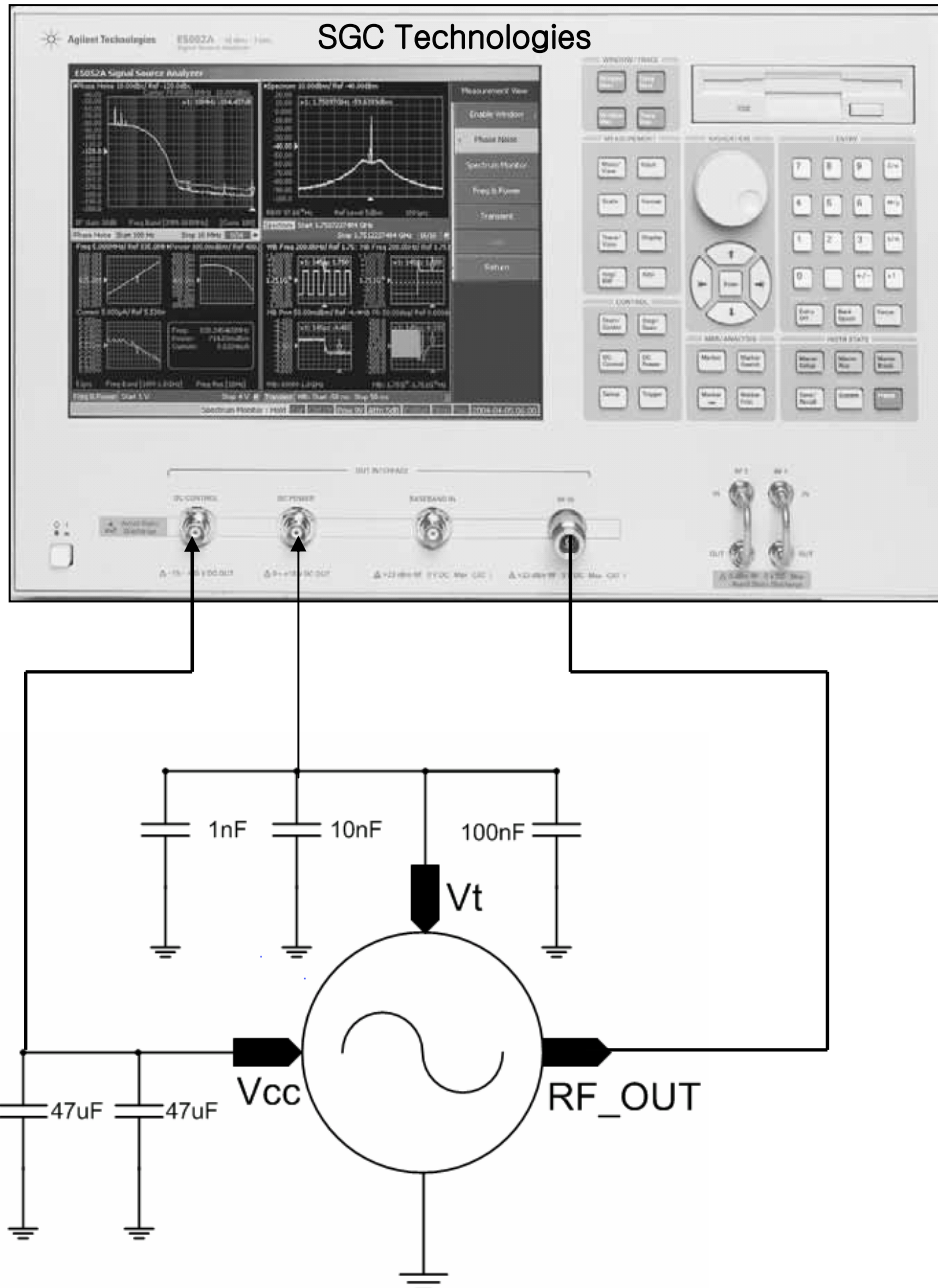
(Over output frequency range, T_A -40 to +85°C, Vcc=3.8V, Output load 50Ω, Unless otherwise stated)

ITEM	SPEC.			UNIT	Test conditions
	Min	Typ	Max		
Supply Voltage		3.8		V	DC Voltage
Frequency			470	MHz	Vcc = 3.8V, Vt = 0.5V
	520				Vcc = 3.8V, Vt = 4.5V
Current		18	20	mA	Vcc = 3.8V, Vt = 2.5V
Output Level	-4	-1	+2	dBm	Vcc = 3.8V, Vt = 0.5V ~ 4.5V
Phase Noise (C/N)		-112	-109	dBc/Hz	10kHz offset, Vcc=3.8V, Vt = 2.5V
2 nd Harmonic			-20	dBc	Vcc = 3.8V, Vt = 2.5V
Tuning Sensitivity		22		MHz/V	Vt = 0.5V ~ 4.5V
Pulling		< 2		MHz	Vcc = 3.8V, Vt = 2.5V VSWR = 1.67 : 1 All phase
Pushing		< 2		MHz	Vcc = 3.8V±0.3V, Vt = 2.5V
Input Capacitance		47		pF	

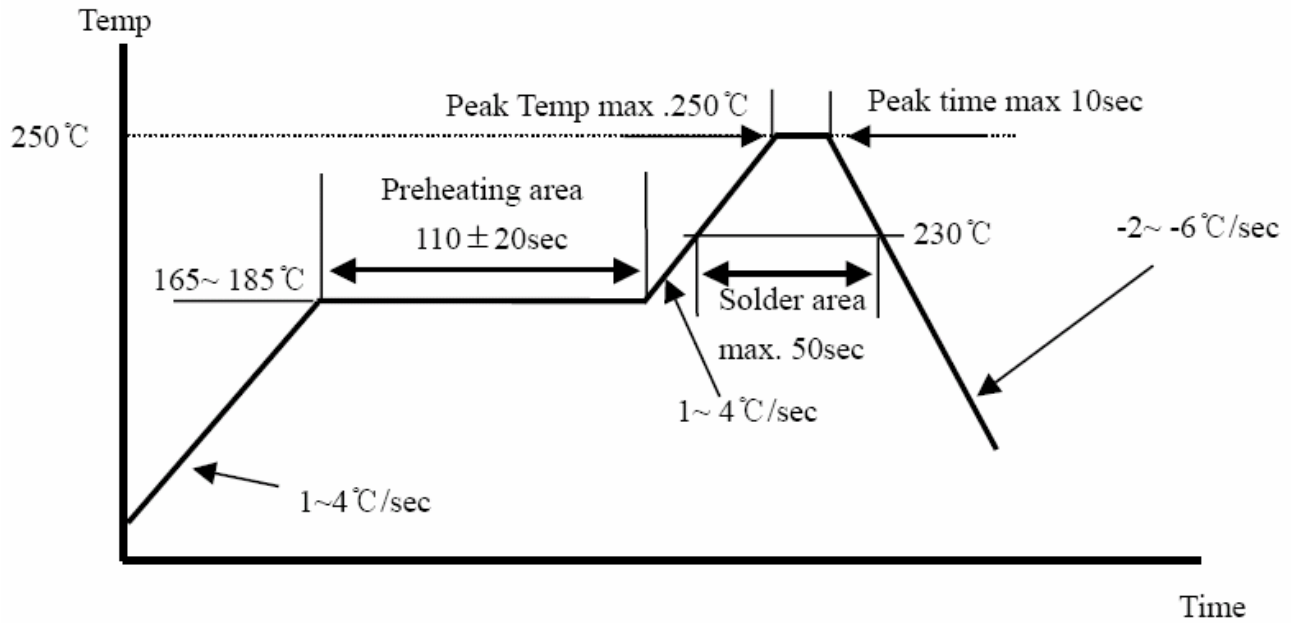
Testing temperature at 25±5°C

4. Measurement Circuit

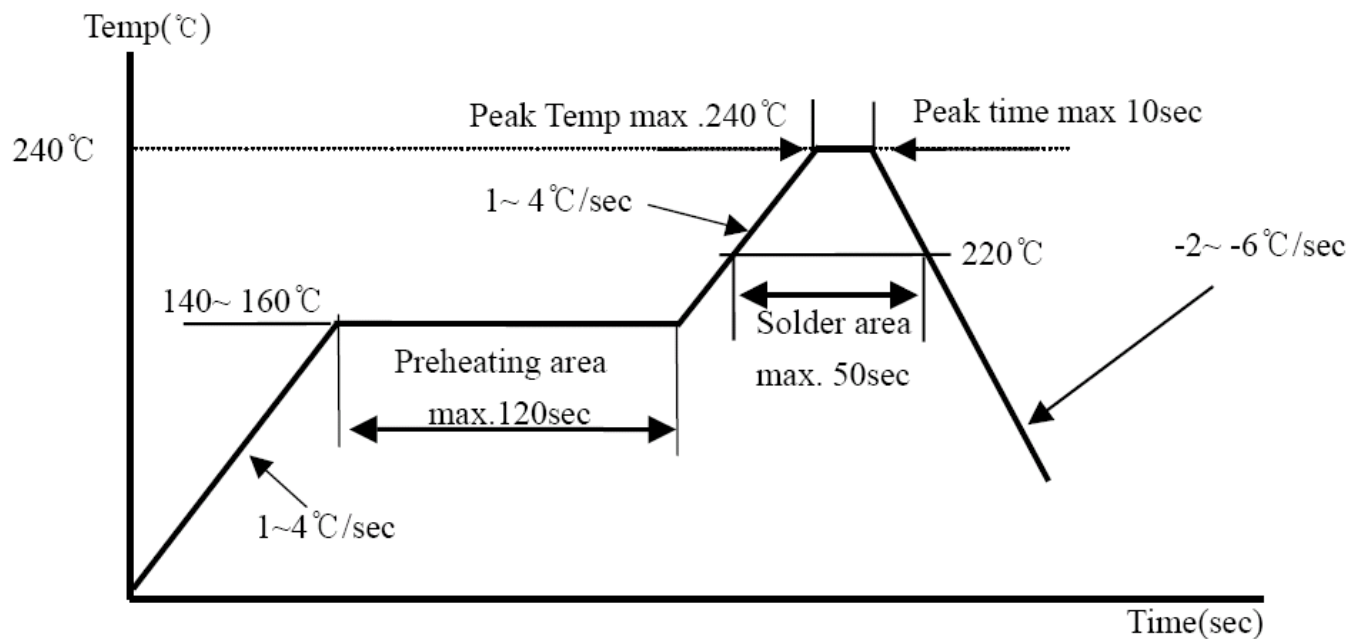
Test Equipment : Agilent E5052A or 4352B



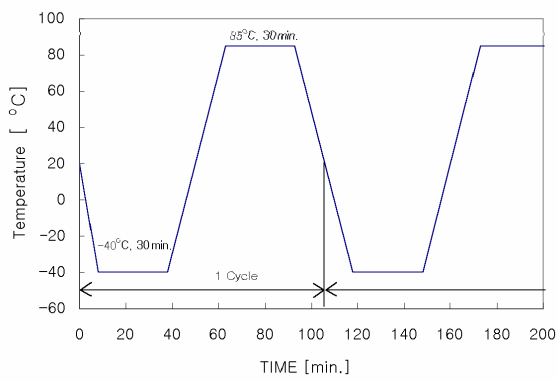
5. Recommendable Reflow Soldering Profile (Pb - Free)



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



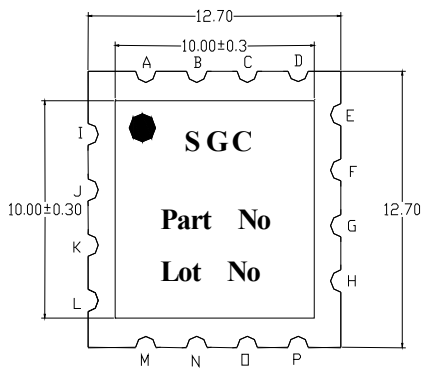
7. Environmental Requirement

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

12.7 × 12.7 mm

TOP VIEW



TITLE OF TERMINAL

A,B,D,E,F,H,I,K,L,M,O,P : GROUND

C : POWER SUPPLY

G : OUTPUT POWER

J : CONTROL VOLTAGE

N : AUDIO MODULATION(OR N.C)

* UNIT : mm

CASE T : 0.25mm

BOTTOM VIEW

