

DATA

FOR

METALLIZED PLASTIC FILM CAPACITOR
チップ積層コンデンサ

[NSPC 50V (X) type]

SAMPLES (試料) :	NSPC101J50A3X	(DC 50V . 0.0001 μ F)
	NSPC102J50A3X	(DC 50V . 0.001 μ F)
	NSPC103J50B5X	(DC 50V . 0.01 μ F)
	NSPC104J50D4X	(DC 50V . 0.1 μ F)

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Fig. 1

温度特性 (TEMPERATURE CHARACTERISTIC)

SAMPLE	n	TEST CONDITION
○—○ NSPC101J50A3X	12	Temperature : -55~125°C
●—● NSPC102J50A3X	12	
×—× NSPC103J50B5X	12	
△—△ NSPC104J50D4X	12	

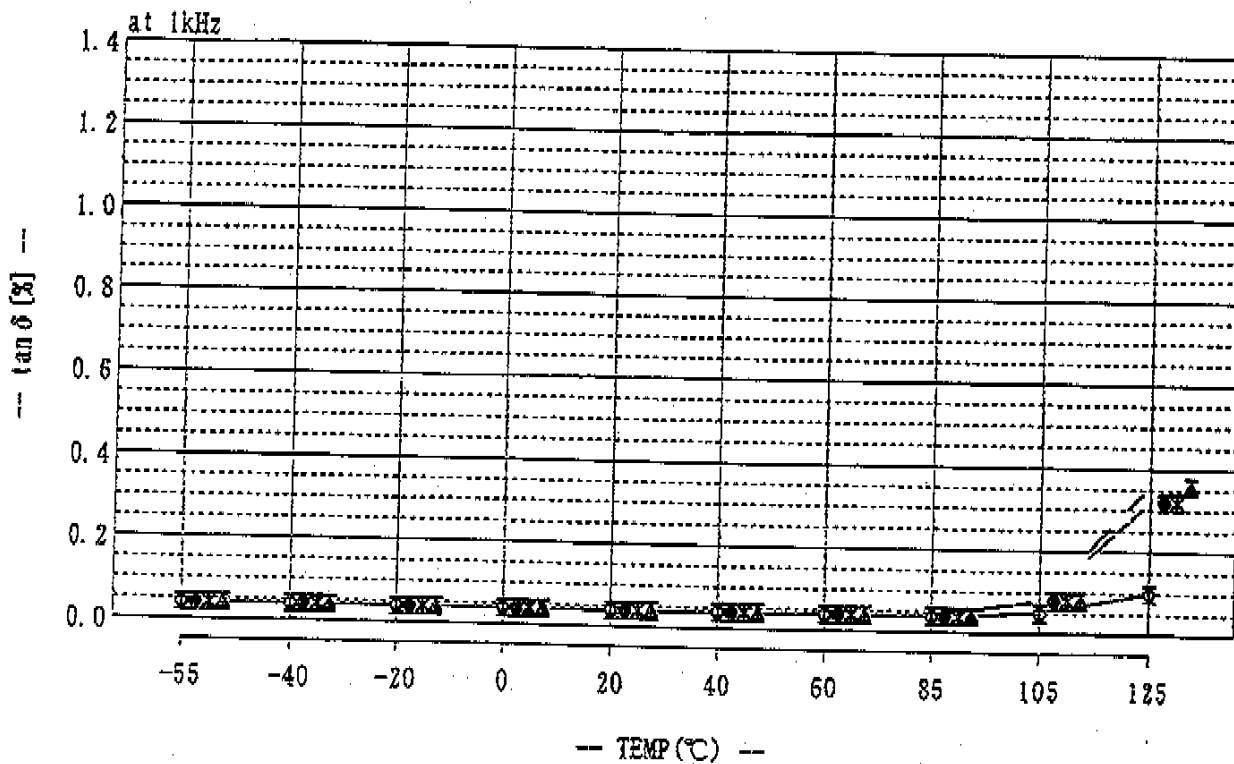
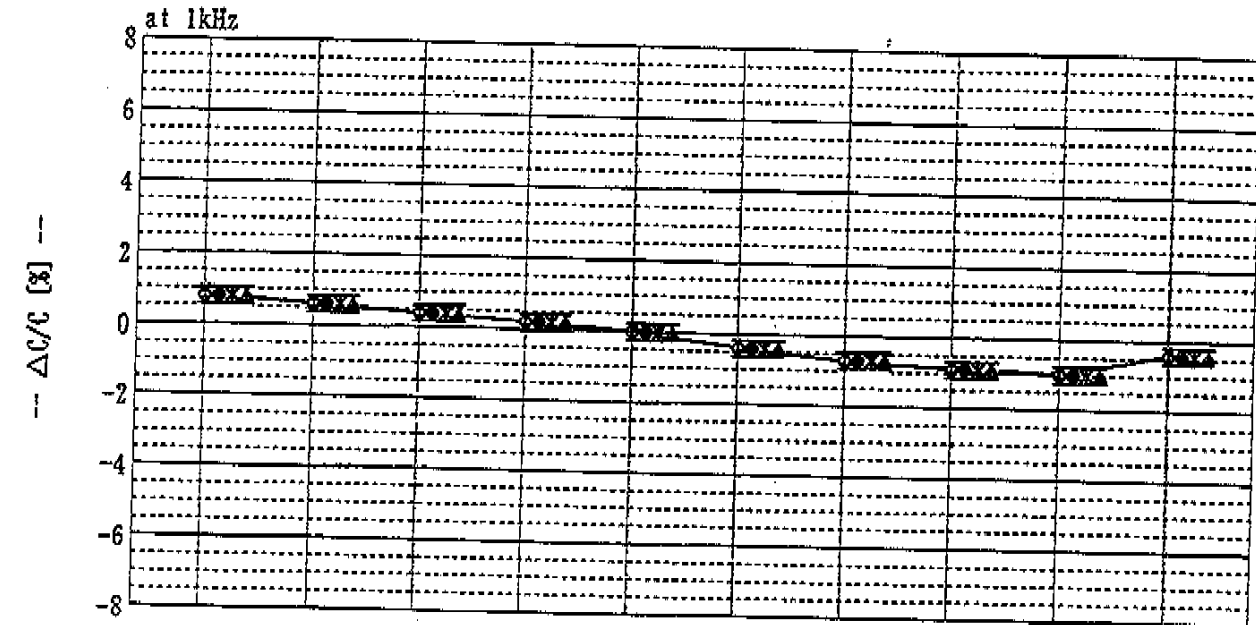


Fig. 2
 温度特性 (TEMPERATURE CHARACTERISTIC)

SAMPLE	n	TEST CONDITION
○—○ NSPC101J50A3X	12	Temperature : -55~125°C
●—● NSPC102J50A3X	12	
×—× NSPC103J50B5X	12	
△—△ NSPC104J50D4X	12	

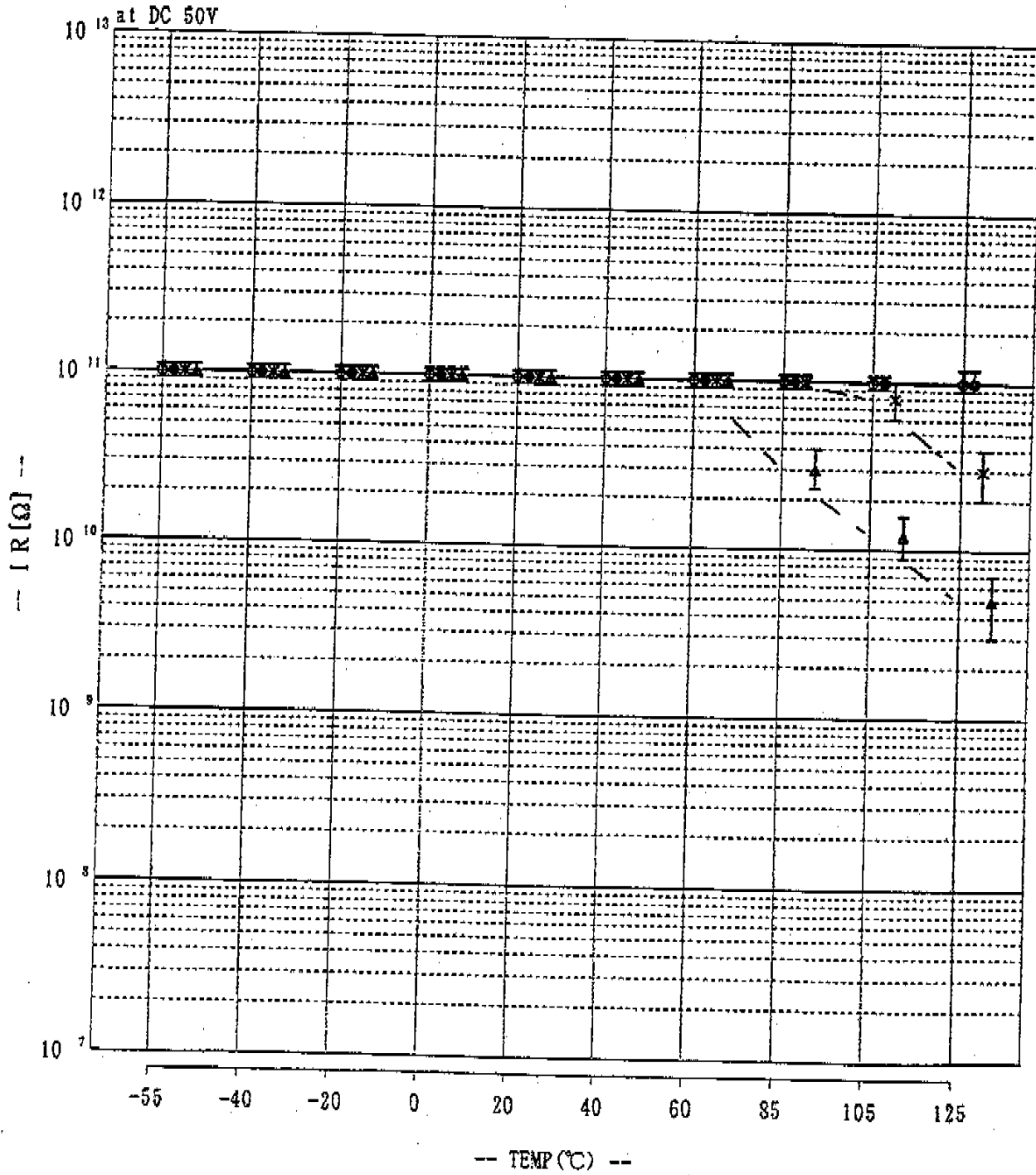
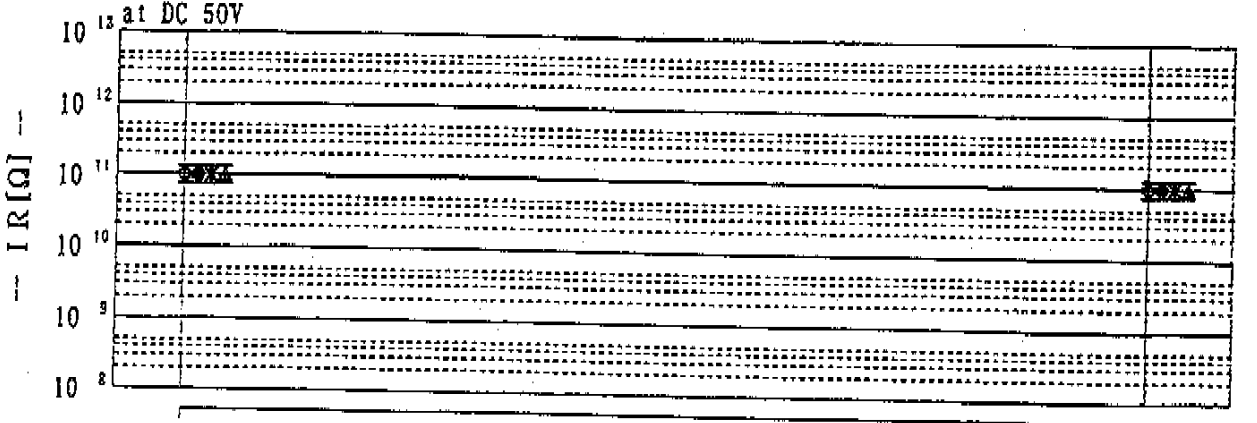
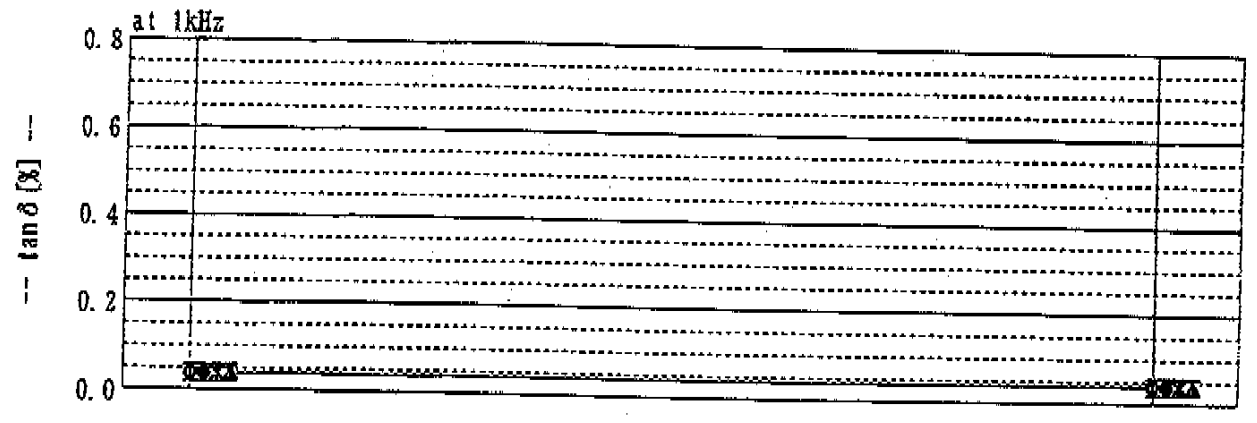
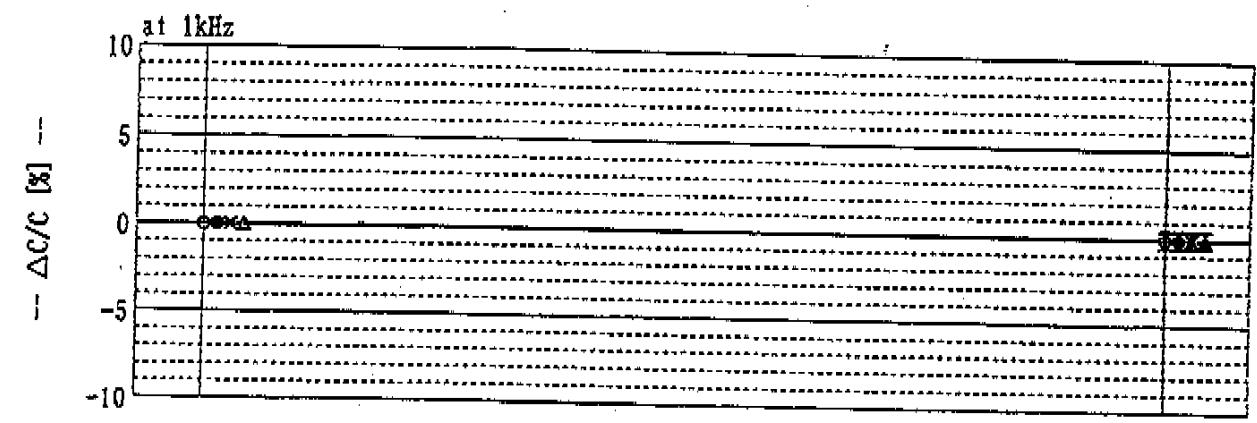


Fig. 3

SOLDERING HEAT RESISTANCE TEST (REFLOW METHOD)

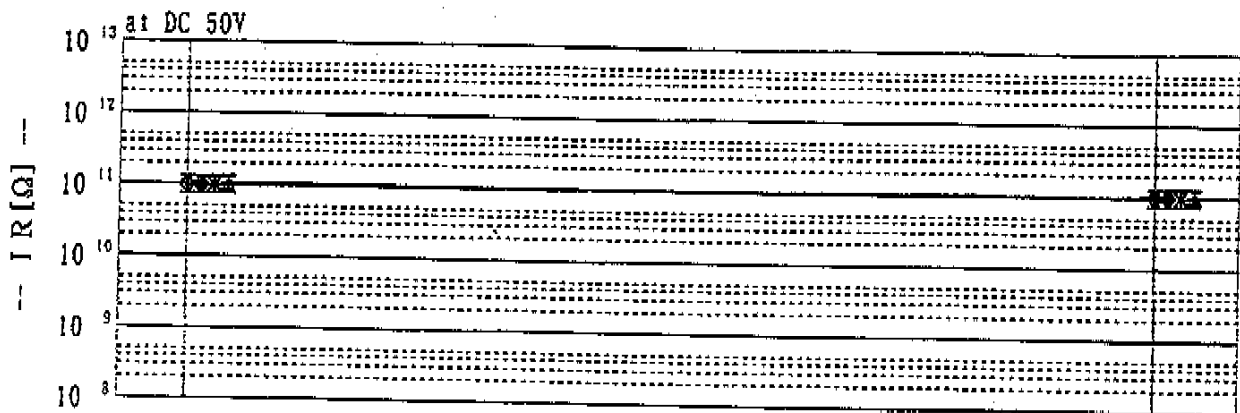
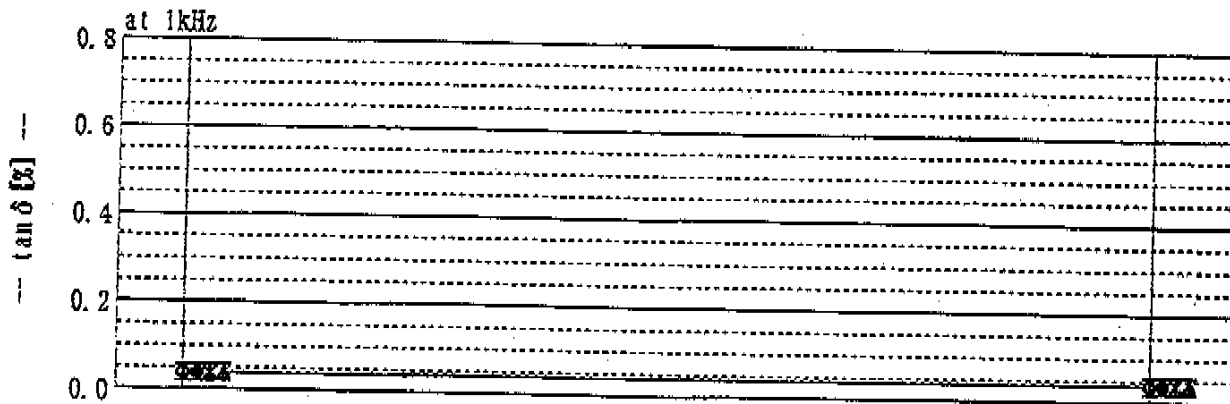
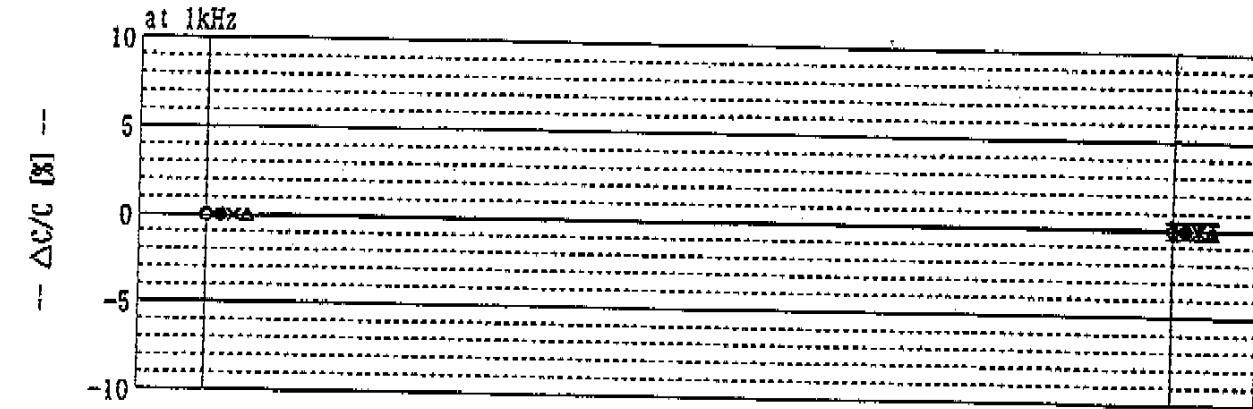
SAMPLE	n	TEST CONDITION
○—○ NSPC101J50A3X	12	Reflow to FIG. (Reflow temperature profile)
●—● NSPC102J50A3X	12	
×—× NSPC103J50B5X	12	
△—△ NSPC104J50D4X	12	



Initial After test

Fig.4 耐振性試験 (VIBRATION TEST)

SAMPLE	n	TEST CONDITION
○—○ NSPC101J50A3X	12	Vibration frequency:10~55 Hz (10-55-10 Hz/for 1min) Total amplitude : 1.5mm 3directions (X.Y.Z)each 2hours Attentions:After soldering on Glass epoxy P.W.B
●—● NSPC102J50A3X	12	
×—× NSPC103J50B5X	12	
△—△ NSPC104J50D4X	12	

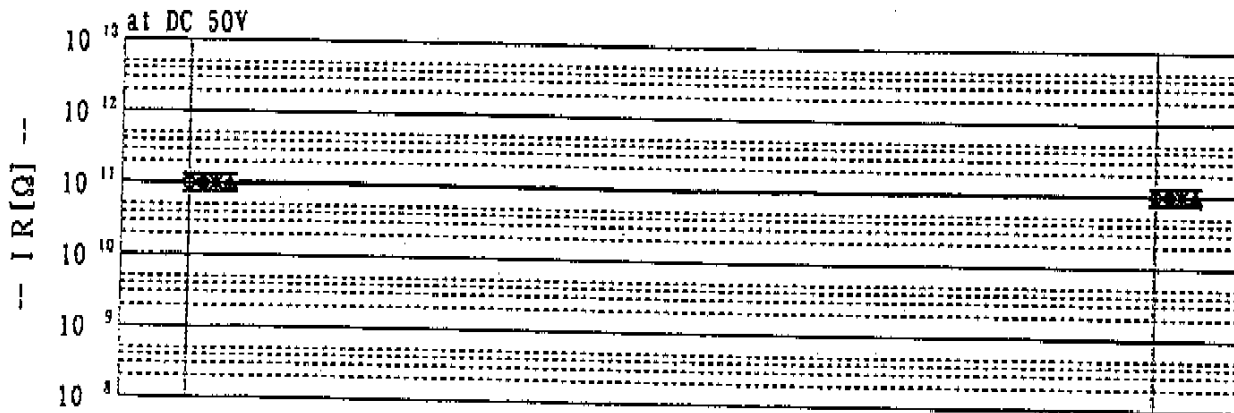
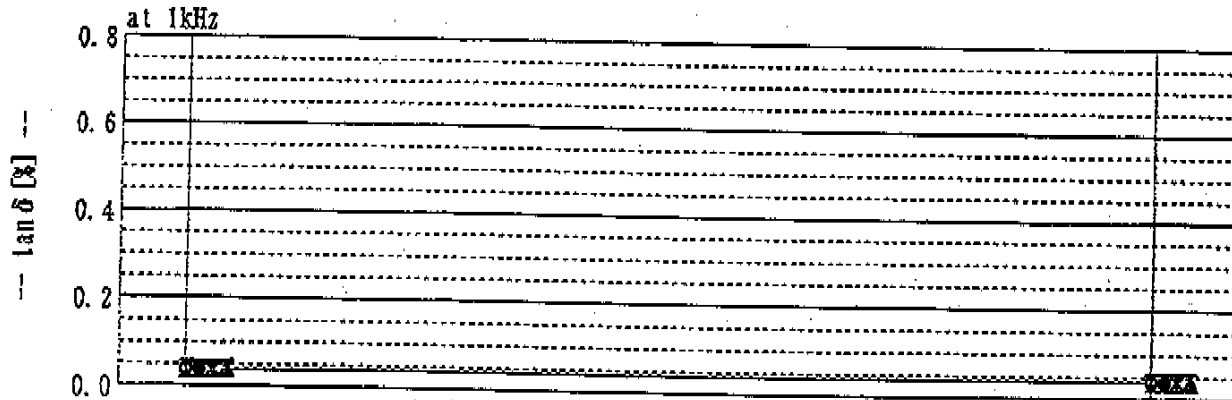
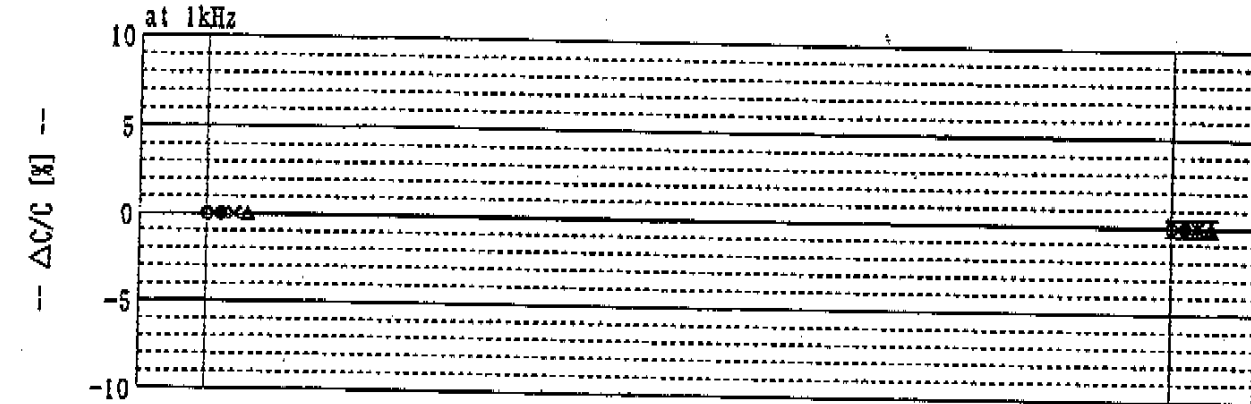


Initial

After test

Fig.5
 温度サイクル試験 (THERMAL CYCLING TEST)

SAMPLE	n	TEST CONDITION
○—○ NSPC101J50A3X	12	5 cycles
●—● NSPC102J50A3X	12	
×—× NSPC103J50B5X	12	
△—△ NSPC104J50D4X	12	



initial

After test

Fig 6

昇圧破壊試験 (DC) BREAKDOWN VOLTAGE TEST (DC)

SAMPLE	n	TEST CONDITION
○—○ NSPC101J50A3X	12	Temperature : RT
●—● NSPC102J50A3X	12	Slow-up voltage
×—× NSPC103J50B5X	12	Speed : 10 v/s
△—△ NSPC104J50D4X	12	Cut-off current : 5 mA

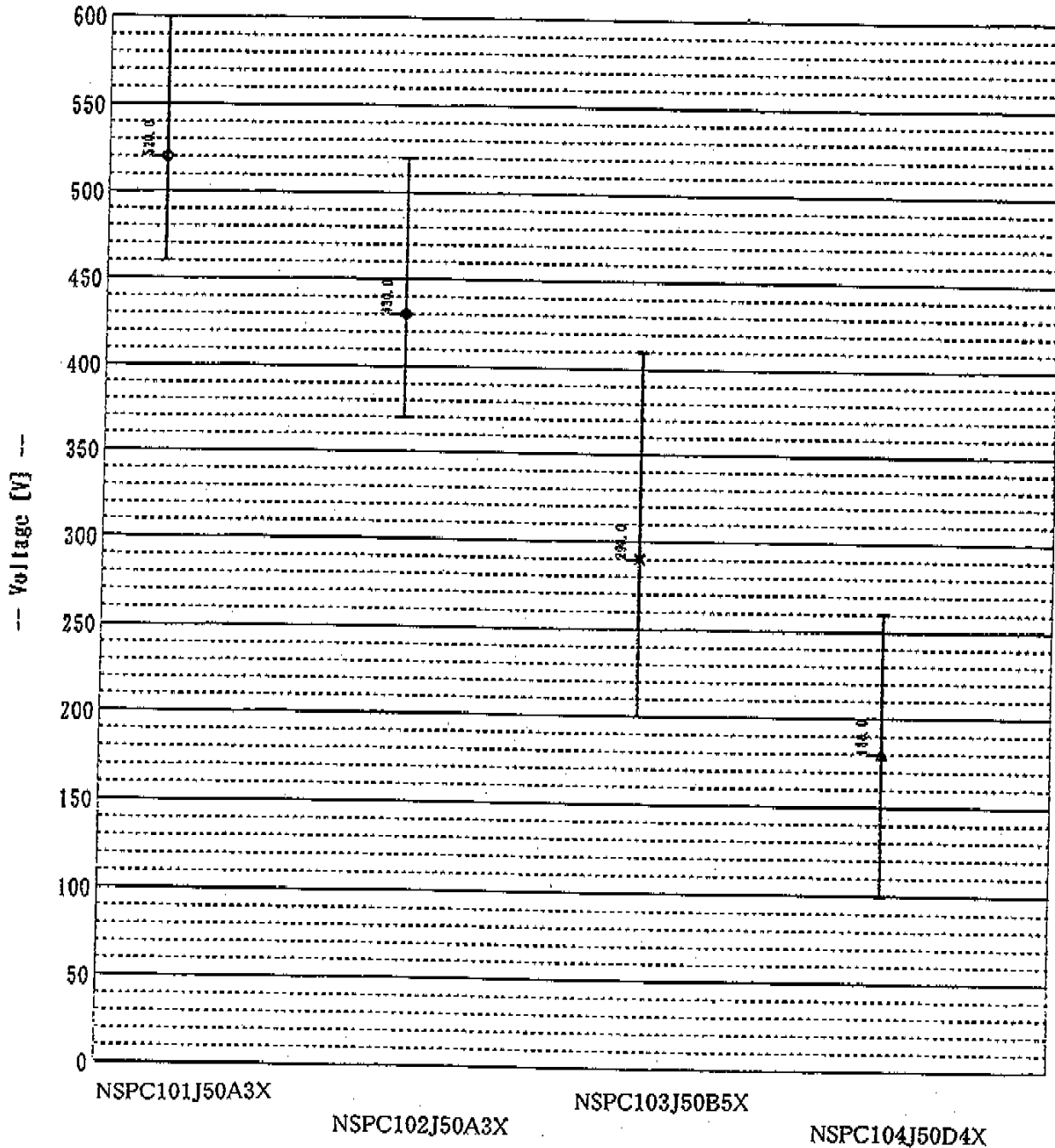


Fig. 7 High Temperature Loading Test

SAMPLE	n	TEST CONDITION
○—○ NSPC101J50A3X	12	Temperature : 125±2 [°C] Voltage : Rated Voltage×1.25
●—● NSPC102J50A3X	12	
×—× NSPC103J50B5X	12	
△—△ NSPC104J50D4X	12	

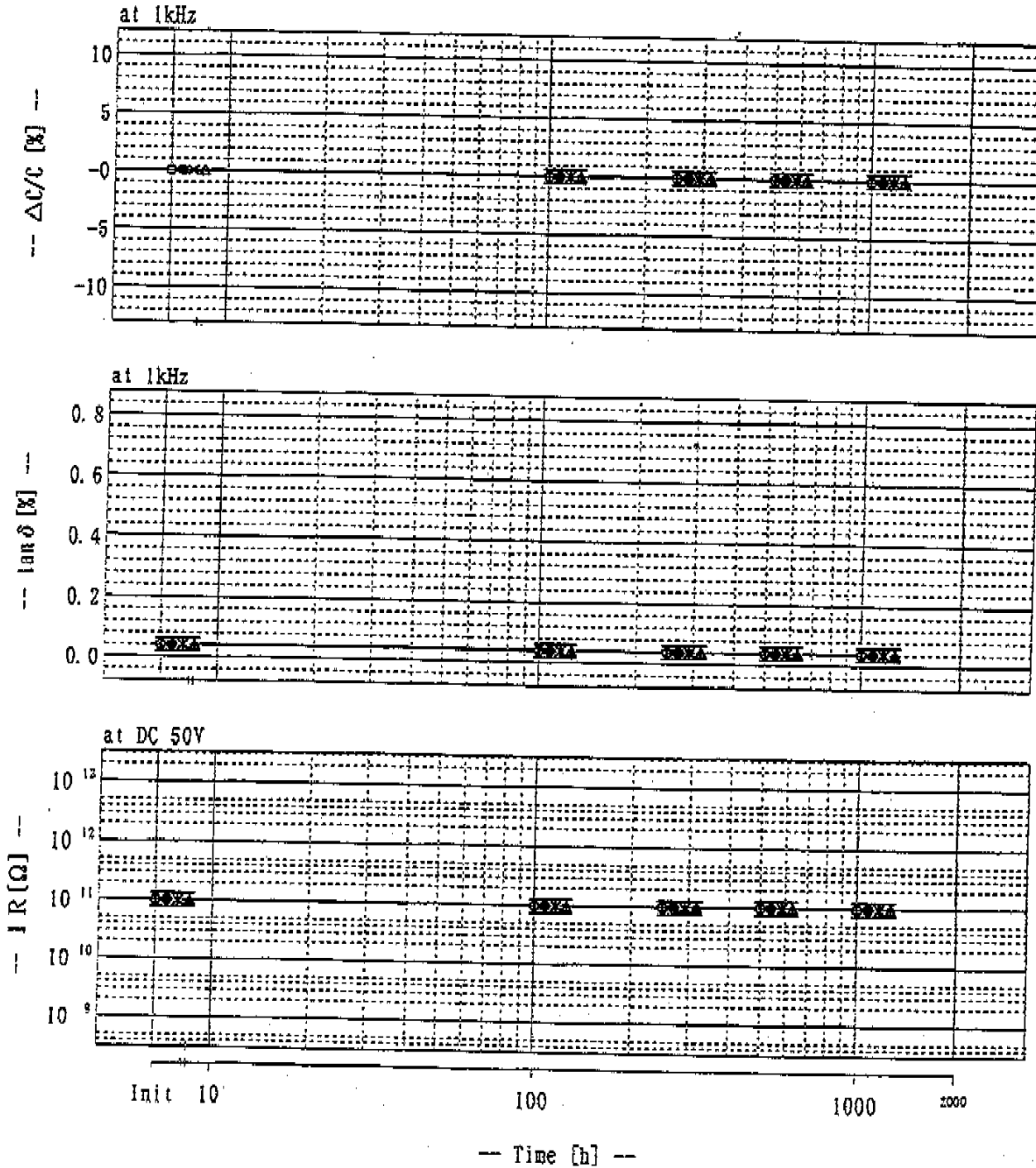


Fig.8 Moisture Resistance Loading Test I

SAMPLE	n	TEST CONDITION
○—○ NSPC101J50A3X	12	Temperature : 40±2 [°C] Humidity : 90~95 [%RH] Voltage : DC 50 [V]
●—● NSPC102J50A3X	12	
×—× NSPC103J50B5X	12	
△—△ NSPC104J50D4X	12	

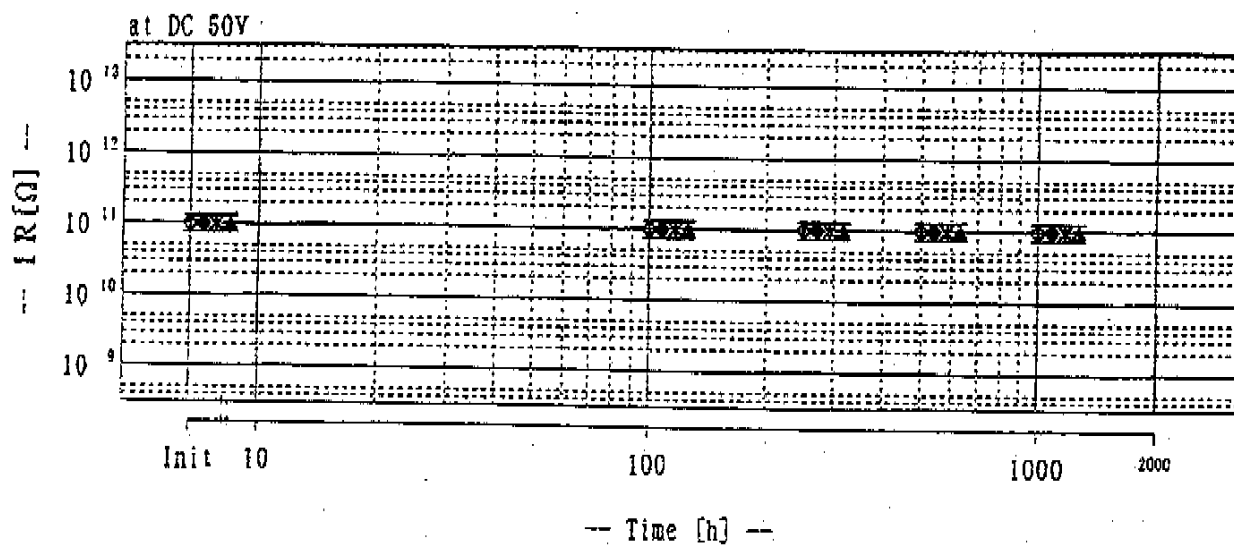
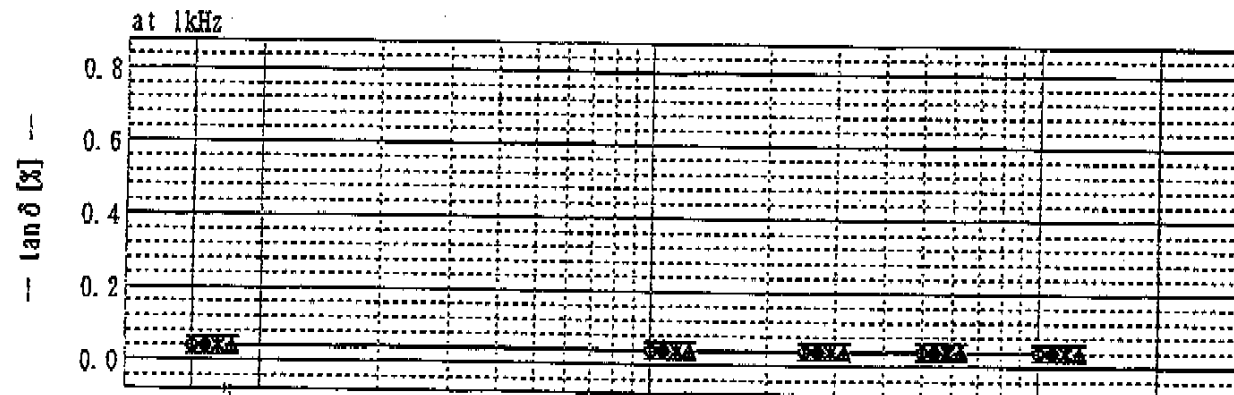
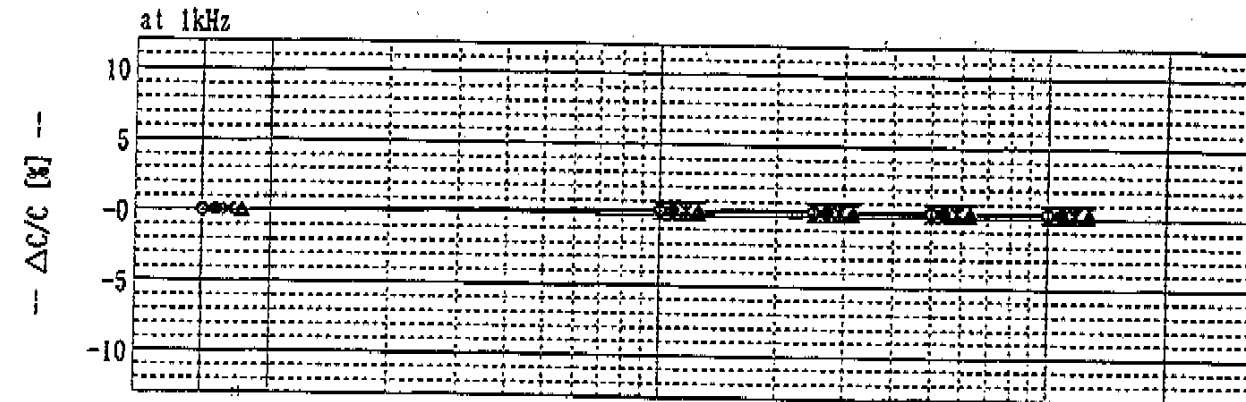


Fig. 9 Moisture Resistance Loading Test II

SAMPLE	n	TEST CONDITION
○—○ NSPC101J50A3X	12	Temperature : 60±2 [°C] Humidity : 90~95 [%RH] Voltage : DC 50 [V]
●—● NSPC102J50A3X	12	
×—× NSPC103J50B5X	12	
△—△ NSPC104J50D4X	12	

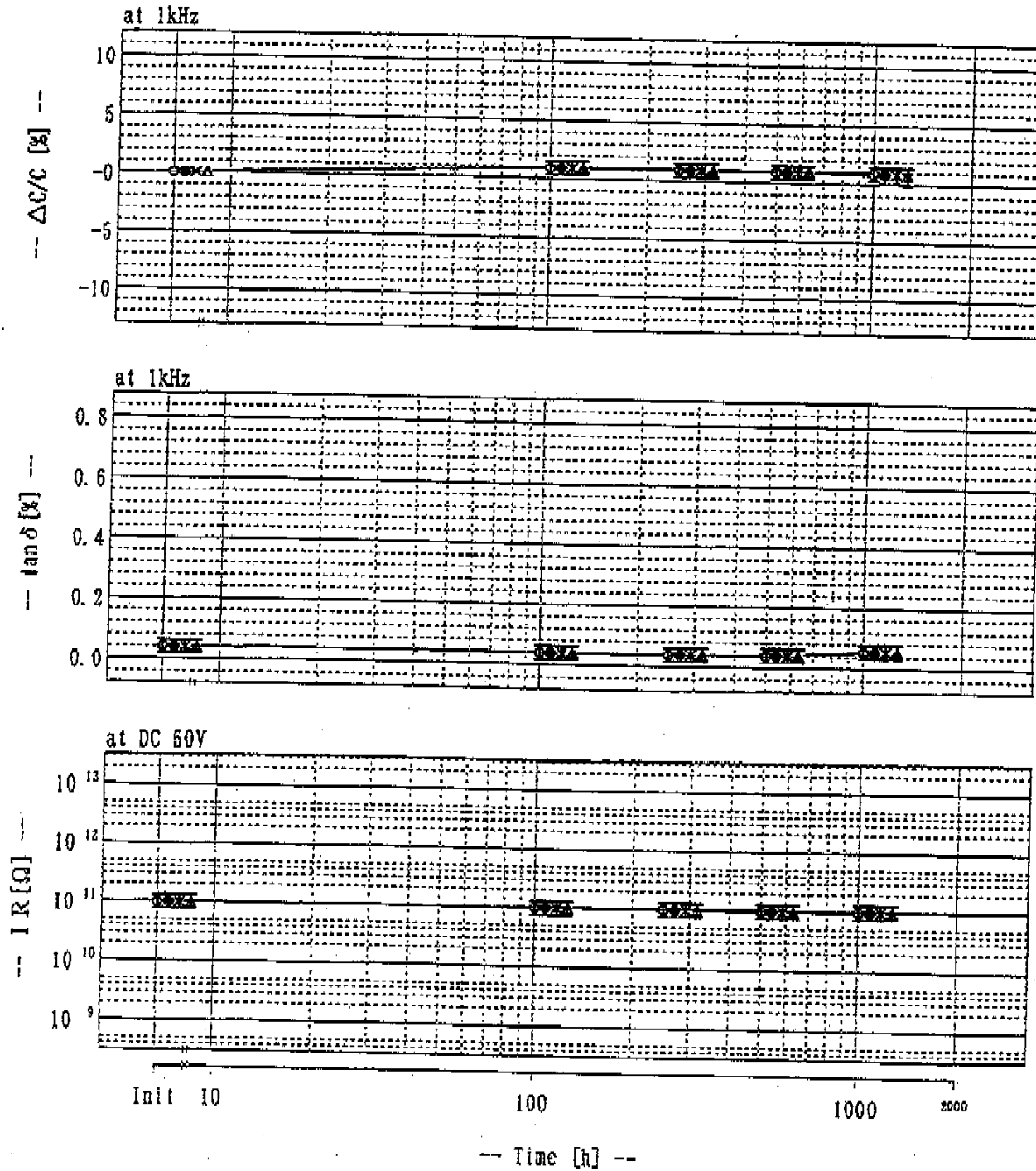


Fig.10 Moisture Resistance Loading Test III

SAMPLE	n	TEST CONDITION
○—○ NSPC101J50A3X	12	Temperature : 85±2[°C] Humidity : 85±2[%RH] Voltage : DC 50[V]
●—● NSPC102J50A3X	12	
x—x NSPC103J50B5X	12	
△—△ NSPC104J50D4X	12	

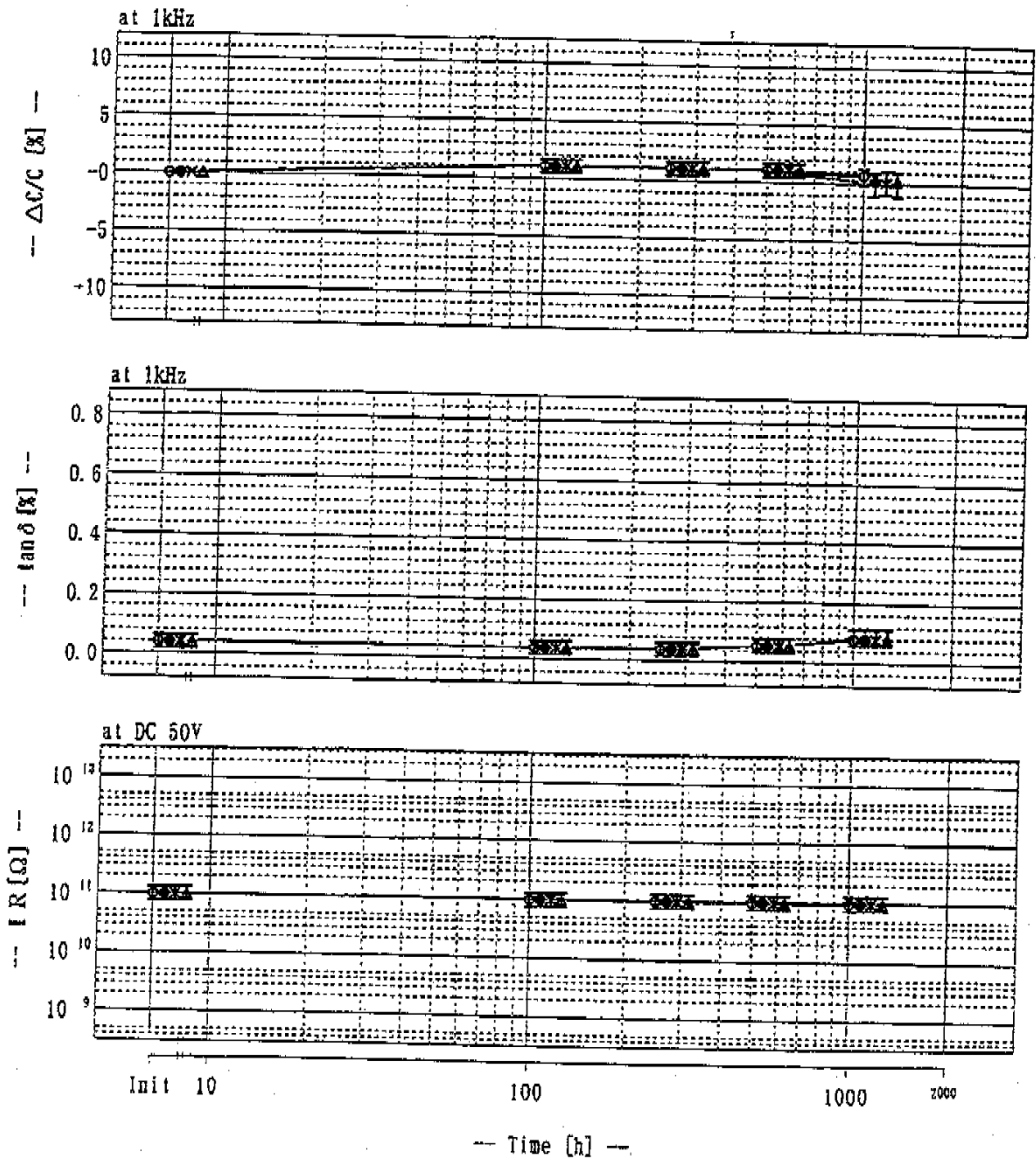
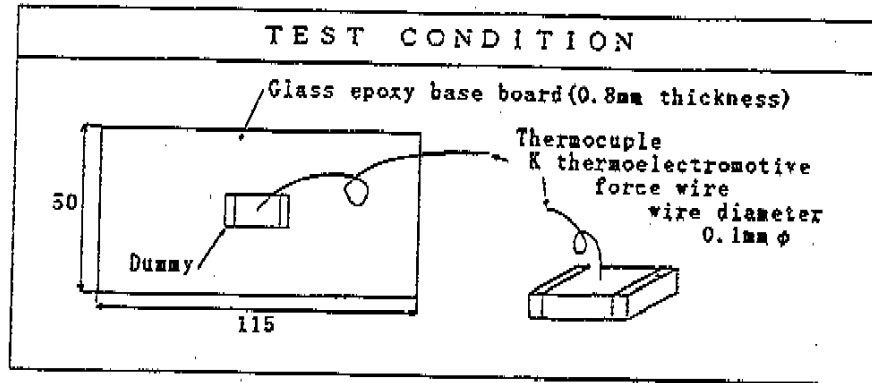


FIG. // Appendix : Reflow Soldering Profile



temperature of the capacitor surface

