



## SPECIFICATION FOR APPROVAL

### 技术规格确认书

NXP Semiconductors KTY83/110 Replacement SOD-68 Limit  
Axial PTC Thermistor 1KOhm For Temperature Sensor

客户名称 Customer			
产品类型 Product Model	PTC Thermistor		
型号规格 Part Number	LPT-KTY83-110F		
文控编号 Specification file No.	P-1712052B		
版本号 Version	V1	日期 Date	2017.12.01

	DES.	CHK.	APP.
Mfg.			
Cust.			

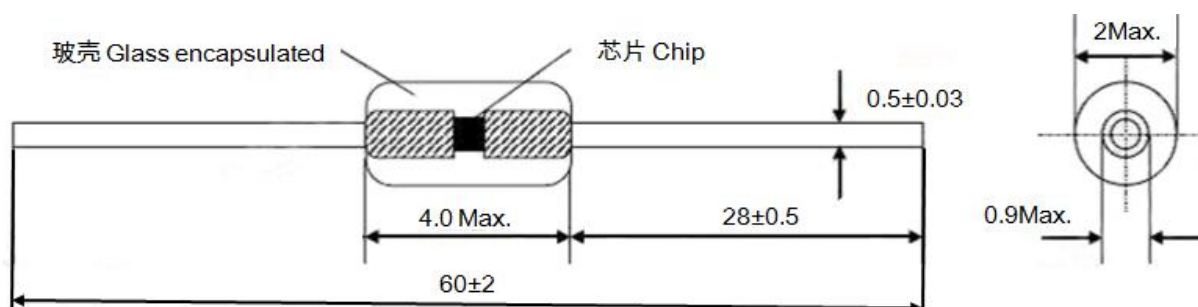
This Specification indicates the parameters, electrical properties, test condition, structure and dimension of the NTC Thermistors and Temperature Sensors manufactured by Ao littel. it is sincerely for your confirmation. Confirm got the spec and accept as our company's warehouse accept standard.

Any doubt, please contact us in due course, or if you change the usage of the products, or if the operational environment changed evidently, please inform us.



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## 1、Dimension (Unit: mm)



## 2、Material explanation

NO	COMPONENT	MATERIAL AND SPECIFICATIONS	Q'TY	REMARK
2-1.	Tinned Dumet Wire	Copper-Clad Ni-Fe 0.5mm	2	
2-2.	Element	Chip (Silicon)	1	
2-3.	Housing	OD $\Phi 2.0\text{mm}_{\text{max}}$ , ID $\Phi 0.8\pm 0.05\text{mm}$	1	

## 3、Electric Performances

NO	Item	Sign	Test Conditions	Min.	Normal value	Max.	Unit
3-1.	Resistance at 25°C	R25	Ta=25±0.05°C	990	1000	1010	Ω
3-2.	Resistance at 100°C	R100	Ta=100±0.05°C	/	/	/	Ω
3-3.	Dissipation factor	σ	Ta=25±0.5°C (In still air)	1.5	/	/	mw/°C
3-4.	Time constant	τ		/	/	17	sec
3-5.	Insulation resistance	/	100V DC	100	/	/	MΩ
3-6.	Maximum operating current	I <sub>max</sub>	/	/	/	8	mA
3-7.	Rated operating current	I <sub>N</sub>	/	/	2	/	mA
3-8.	Rated Power	P <sub>max</sub>	/	/	/	50	mW
3-9.	Operating temp.range	T <sub>A</sub>	/	-55	/	+150	°C



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## 4、R—T Conversion Table

Centigrade (°C)	Fahrenheit (°F)	T/°C %/ (K)	LPT-KTY83-110F			DR (K)
			Resistance (Ω)			
			Min.	Center	Max.	
-55	-67	0.99	475	490	505	±3.02
-50	-58	0.98	500	515	530	±2.92
-40	-40	0.96	552	567	582	±2.74
-30	-22	0.93	609	624	638	±2.55
-20	-4	0.91	669	684	698	±2.35
-10	14	0.88	733	747	761	±2.14
0	32	0.85	802	815	828	±1.91
10	50	0.83	874	886	898	±1.67
20	68	0.80	950	961	972	±1.41
25	77	0.79	990	1000	1010	±1.27
30	86	0.78	1029	1040	1051	±1.39
40	104	0.75	1108	1122	1136	±1.64
50	122	0.73	1192	1209	1225	±1.91
60	140	0.71	1278	1299	1319	±2.19
70	158	0.69	1369	1392	1416	±2.49
80	176	0.67	1462	1490	1518	±2.8
90	194	0.65	1559	1591	1623	±3.12
100	212	0.63	1659	1696	1733	±3.46
110	230	0.61	1762	1805	1847	±3.83
120	248	0.58	1867	1915	1963	±4.33
125	257	0.55	1919	1970	2020	±4.66
130	266	0.52	1970	2023	2077	±5.07
140	284	0.45	2065	2124	2184	±6.28
150	302	0.35	2145	2211	2277	±8.55

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## 5、 Packing Specification

B (Bulk) Quantity of each polybag (pcs)	TA (Taping) Quantity of each inter-box (pcs)
500	5000
	

## 6、 Storage Conditions

6.1 Storage Temperature:  $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$

6.2 Relative Humidity:  $\leq 75\% \text{ RH}$

6.3 Keep products away from corrosive such as sulfur, chlorine gas or acid, or it may cause oxidization of electrode, resulting in poor solderabilit.

6.4 The products can be used in two years under storage co

## 7、 Notice

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