

# KTY Silicon Temperature Sensor



## KTY84-1XX Silicon Temperature Sensor



### 1. SUMMARIZATION

KTY series silicon temperature sensor is the lastest sensor in the international market at the end of the twentieth century. It can measure temperature in the range -55~800°C, such as air conditioning, oven and so on. Especially in the electric motor winding and bearing temperature measurement, there is a wide range of applications.

### 2. CHARACTERISTIC

KTY series silicon temperature sensor has simple structure, stable performance, fast moving time, linear resistance-temperature curve and other such characteristics.

### 3. TECHNICAL PARAMETER

3.1 Insulation resistance  $\geq 100M\Omega$

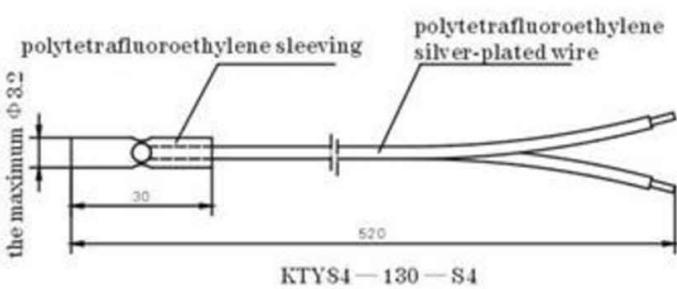
3.2 The material of lead wire is 0.35mm<sup>2</sup>, polytetrafluoroethylene withstand high temperature wire.

3.3 Examples of typical dimensions and model.

#### Examples for Ordering

KTYS4 — 130 — S4

Design serial number  
Precision  
KTYS4 serial silicon temperature sensors



KTYS4 — 130 — S4

### 3.4. Technical parameter

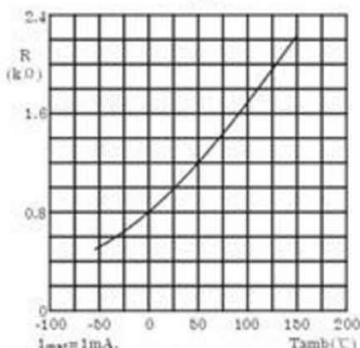
Specifications	Temperature coefficient	Heat actuation time(τ)			Operating temperature range(℃)
		In still air	In still liquid	In moving liquid	
KTYS1	0.79%/K	30s	5s	3s	-55~150
KTYS2	0.79%/K	7s	1s	0.5s	-55~150
KTYS3	0.76%/K	20s	1s	0.5s	-55~175
KTYS4	0.61%/K	20s	1s	0.5s	-40~300
KTYS5	0.76%/K	20s	1s	0.5s	-40~125

### 3.5. KTY deviation

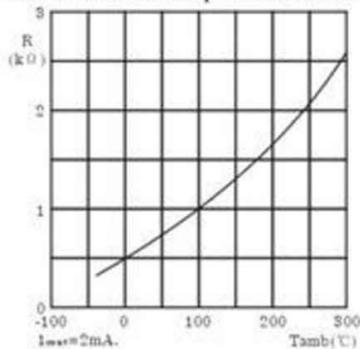
Label	Model	Condition	Min.	Median	Max.	Unit
R25	KTYS1-110	Ambient temperature: 25°C Constant current: 1mA	990	1000	1010	Ω
	KTYS1-120		980	1000	1020	
	KTYS1-121		980	990	1000	
	KTYS1-122		1000	1010	1020	
	KTYS1-150		950	1000	1050	
	KTYS1-151		950	975	1000	
	KTYS1-152		1000	1025	1050	
	KTYS2-210		1980	2000	2020	

Label	Model	Condition	Min.	Median	Max.	Unit
R25	KTYS2-220	Ambient temperature: 25°C Constant current: 1mA	1960	2000	2040	Ω
	KTYS2-221		1960	1980	2000	
	KTYS2-222		2000	2020	2040	
	KTYS2-250		1900	2000	2100	
	KTYS2-251		1900	1950	2000	
	KTYS2-252		2000	2050	2100	
	KTYS3-110		990	1000	1010	
	KTYS3-120		980	1000	1020	
	KTYS3-121		980	990	1000	
	KTYS3-122		1000	1010	1020	
	KTYS3-150		950	1000	1050	
	KTYS3-151		950	975	1000	
R100	KTYS4-130	Ambient temperature: 100°C Constant current: 1mA	970	1000	1030	Ω
	KTYS4-150		950	1000	1050	
	KTYS4-151		950	975	1000	
	KTYS4-152		1000	1025	1050	
R25	KTYS5-110	Ambient temperature: 25°C Constant current: 1mA	990	1000	1010	Ω
	KTYS5-120		980	1000	1020	
	KTYS5-121		980	990	1000	
	KTYS5-122		1000	1010	1020	
	KTYS5-150		950	1000	1050	
	KTYS5-151		950	975	1000	
	KTYS5-152		1000	1025	1050	

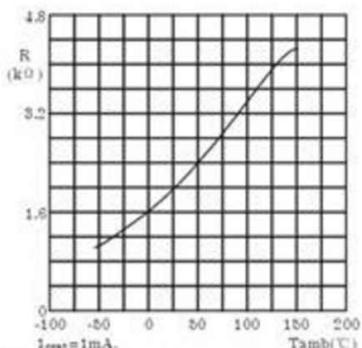
KTY Resistance-temperature curve chart



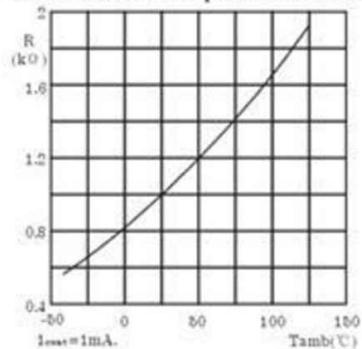
KTVS1 Resistance-temperature curve chart



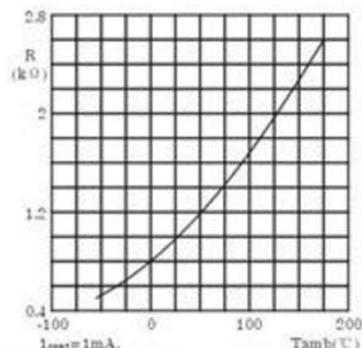
KTVS4 Resistance-temperature curve chart



KTVS2 Resistance-temperature curve chart



KTVS3 Resistance-temperature curve chart



KTVS5 Resistance-temperature curve chart