



KTY Silicon Sensors

KTY Silicon Sensors are based on the spreading resistance principle. And hence has a positive temperature co-efficient. These sensors are mainly used for measurement , control and regulation of air, gas and liquids for a temperature range of -50°C to 150°C .

These Silicon based KTY Sensors give cost competitive solutions to the customers. They are also available with different lead lengths and different version i.e. Solder version and Crimp version



Features

1. High-accuracy and reliability.
2. Long term stability.
3. Virtually linear characteristics.
4. Fast response time.
5. Positive Temperature Co-efficient, fail-safe behavior
6. Temperature range: -50°C to 150°C (-60°F to 300°F)
7. Resistance tolerance (R25) of $\pm 3\%$ or $\pm 1\%$
8. Polarity independent due to symmetrical construction.



Available types of KTY Silicon Sensors

- ◆ KTY 84 -130
- ◆ KTY 83 -110
- ◆ KTY 81 - 110

These types are available in various length & housing as per the customer request.



Applications

1. Electronic circuit protection.
2. Protection for power supplies.
3. Domestic appliances.
4. The white goods industry.
5. The automotive industry.



Ambient temperature, corresponding resistance, temperature coefficient and maximum expected temperature error.

KTY 84-130

Ambient temperature		Temperature Coefficient (% / K)	KTY 84/130			
(°C)	(°F)		Resistance (Ω)			Temperature error (K)
			Min	Typ	Max	
-40	-40	0.84	340	359	379	+ 6.48
-30	-22	0.83	370	391	411	± 6.36
-20	-4	0.82	403	424	446	± 6.26
-10	14	0.80	437	460	483	± 6.16
0	32	0.79	474	498	522	± 6.07
10	50	0.77	514	538	563	± 5.98
20	68	0.75	555	581	607	± 5.89
25	77	0.74	577	603	629	± 5.84
30	86	0.73	599	626	652	± 5.79
40	104	0.71	645	672	700	± 5.69
50	122	0.70	694	722	750	± 5.59
60	140	0.68	744	773	801	± 5.47
70	158	0.66	797	826	855	± 5.34
80	176	0.64	852	882	912	± 5.21
90	194	0.63	910	940	970	± 5.06
100	212	0.61	970	1000	1030	± 4.90
110	230	0.60	1029	1062	1096	± 5.31
120	248	0.58	1089	1127	1164	± 5.73
130	266	0.57	1152	1194	1235	± 6.17
140	284	0.55	1216	1262	1309	± 6.63
150	302	0.54	1282	1334	1385	± 7.10

KTY 81-110

Ambient temperature		Temperature Coefficient (% / K)	KTY 81/110			
(°C)	(°F)		Resistance (Ω)			Temperature error (K)
			Min	Typ	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	± 2.80
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

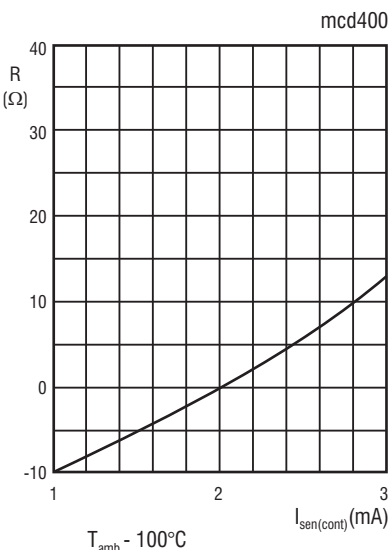


Fig 4.
Deviation of sensor resistance as a function of operating current in still liquid

Other products : PTC Thermistors, Thermistor Protection Relays, PT- 100 RTDs, PT- BTDs, Slot RTDs & Thermal Switches (TOPs)

ISO 9001 : 2008 Certified Company



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