

## Silicon temperature sensors

## KTY81-2 series

**Table 1** Ambient temperature, corresponding resistance, temperature coefficient and maximum expected temperature error for KTY81-210 and KTY81-220 $I_{\text{cont}} = 1 \text{ mA}$ .

AMBIENT TEMPERATURE		TEMP. COEFF. (%/K)	KTY81-210				KTY81-220				
(°C)	(°F)		RESISTANCE (Ω)			TEMP. ERROR (K)	RESISTANCE (Ω)			TEMP. ERROR (K)	
			MIN.	TYP.	MAX.		MIN.	TYP.	MAX.		
-55	-67	0.99	951	980	1009	±3.02	941	980	1019	±4.02	
-50	-58	0.98	1000	1030	1059	±2.92	990	1030	1070	±3.94	
-40	-40	0.96	1105	1135	1165	±2.74	1094	1135	1176	±3.78	
-30	-22	0.93	1218	1247	1277	±2.55	1205	1247	1289	±3.62	
-20	-4	0.91	1338	1367	1396	±2.35	1325	1367	1410	±3.45	
-10	14	0.88	1467	1495	1523	±2.14	1452	1495	1538	±3.27	
0	32	0.85	1603	1630	1656	±1.91	1587	1630	1673	±3.08	
10	50	0.83	1748	1772	1797	±1.67	1730	1772	1814	±2.88	
20	68	0.80	1901	1922	1944	±1.41	1881	1922	1963	±2.66	
25	77	0.79	1980	2000	2020	±1.27	1960	2000	2040	±2.54	
30	86	0.78	2057	2080	2102	±1.39	2036	2080	2123	±2.68	
40	104	0.75	2217	2245	2272	±1.64	2194	2245	2295	±2.97	
50	122	0.73	2383	2417	2451	±1.91	2359	2417	2475	±3.28	
60	140	0.71	2557	2597	2637	±2.19	2531	2597	2663	±3.61	
70	158	0.69	2737	2785	2832	±2.49	2709	2785	2860	±3.94	
80	176	0.67	2924	2980	3035	±2.8	2894	2980	3065	±4.3	
90	194	0.65	3118	3182	3246	±3.12	3086	3182	3278	±4.66	
100	212	0.63	3318	3392	3466	±3.46	3284	3392	3500	±5.05	
110	230	0.59	3523	3607	3691	±3.93	3487	3607	3728	±5.61	
120	248	0.53	3722	3817	3912	±4.7	3683	3817	3950	±6.59	
125	257	0.49	3815	3915	4016	±5.26	3775	3915	4055	±7.31	
130	266	0.44	3901	4008	4114	±6	3861	4008	4154	±8.27	
140	284	0.33	4049	4166	4283	±8.45	4008	4166	4325	±11.46	
150	302	0.20	4153	4280	4407	±14.63	4110	4280	4450	±19.56	