

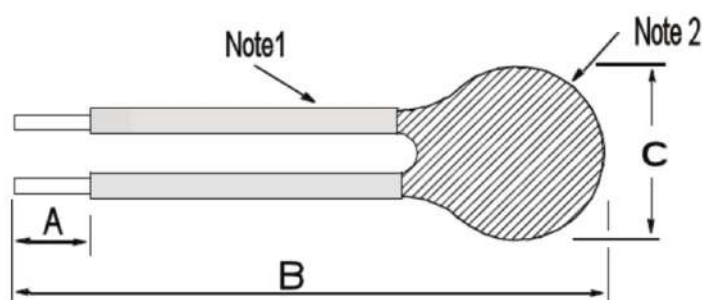


- **High sensitivity**
- **Epoxy encapsulated**
- **Temperature range -40 to 125°C**

The ENTC-EI-10k3977-02 is specifically designed for sensing small changes in temperature for mid-range temperature applications. Due to its high sensitivity and high resistance (10kOhm @25°C) it is ideal for tight tolerance instrumentation in non-condensing moisture environments.

Specifications	
Input Parameters	
Element	NTC Thermistor
Wire material	28AWG solid silver plated copper with white kynar insulation
Performance characteristics	
Resistance at +25°C	10000Ω
Resistance tolerance from 0 to 70°C	±0.2°C
Beta value 25/85 constant	3976k ± 0.5%
Time response in liquids	<1.5 sec
Dissipation factor (in still air)	~ 2mW/°C
Operating temperature range	- 40 to 125°C

Dimensions



	Dimensions		
	A	B	C
	3.5 ± 1mm	250 ± 5mm	2.4mm Maximum
Note 1	28AWG Solid Silver Plated Copper Leads with White Kynar Insulation		
Note	White Stycast Epoxy		

Ordering information

Order code: 95105-ENTC-EI-10k3977-02



Resistance vs. temperature table for 10K3977-02

$R(25) = 10000 \text{ Ohms}$ $B(25/85) = 3976K \pm 0.5\%$

Temp. °C	KΩ	Temp. °C	KΩ	Temp. °C	KΩ	Temp. °C	KΩ	Temp. °C	KΩ
-40	336098	1	31031	42	4916	83	1141	124	350
-39	314553	2	29500	43	4724	84	1105	125	341
-38	294524	3	28054	44	4542	85	1070		
-37	275897	4	26687	45	4367	86	1037		
-36	258563	5	25395	46	4200	87	1005		
-35	242427	6	24172	47	4040	88	974		
-34	227398	7	23016	48	3887	89	945		
-33	213394	8	21921	49	3741	90	916		
-32	200339	9	20885	50	3601	91	888		
-31	188163	10	19903	51	3467	92	862		
-30	176803	11	18973	52	3339	93	836		
-29	166198	12	18092	53	3216	94	811		
-28	156294	13	17257	54	3098	95	787		
-27	147042	14	16465	55	2987	96	764		
-26	138393	15	15714	56	2877	97	741		
-25	130306	16	15001	57	2773	98	720		
-24	122741	17	14324	58	2674	99	699		
-23	115661	18	13682	59	2579	100	678		
-22	109032	19	13073	60	2487	101	659		
-21	102824	20	12493	61	2399	102	640		
-20	97006	21	11943	62	2315	103	622		
-19	91553	22	11420	63	2234	104	604		
-18	86439	23	10923	64	2157	105	587		
-17	81641	24	10450	65	2082	106	571		
-16	77138	25	10000	66	2011	107	555		
-15	72911	26	9572	67	194	108	539		
-14	68940	27	9165	68	1876	109	524		
-13	65209	28	8777	69	1813	110	510		
-12	61703	29	8408	70	1752	111	469		
-11	58405	30	8056	71	1693	112	482		
-10	55304	31	7721	72	1637	113	469		
-9	52385	32	7402	73	1582	114	457		
-8	49638	33	7097	74	1530	115	444		
-7	47050	34	6807	75	1480	116	432		
-6	44613	35	6530	76	1432	117	421		
-5	42317	36	6266	77	1385	118	410		
-4	40151	37	6014	78	1341	119	399		
-3	38110	38	5774	79	1298	120	386		
-2	36181	39	5544	80	1256	121	376		
-1	34366	40	5325	81	1216	122	368		
0	32651	41	5116	82	1178	123	359		