

Features:

- Fast response, excellent thermal tracking
- High accuracy NTC sensor, $10k\Omega \pm 0.2^\circ\text{C}$ accuracy from 0°C to 70°C
- Wide operating temperature range: -40°C to 105°C
- 600 Volt isolation sensor to terminal
- UL94V0 rated epoxy
- 3.6mm (0.142" hole size)

Ordering Information

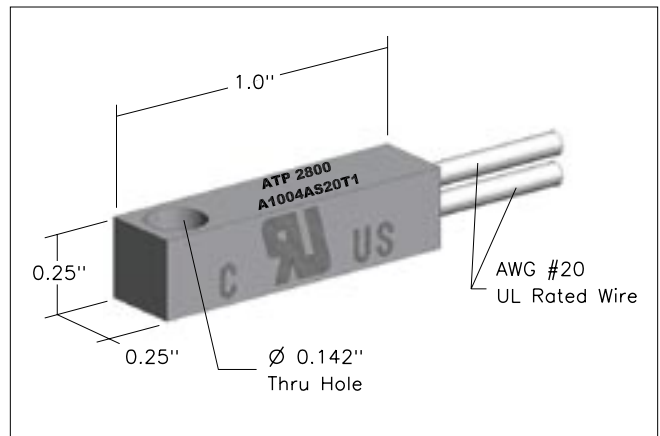
ATP Part Number	R_{25} (Ω)	Material Curve	Accuracy
A1004AS20T1	10,000	Z	$\pm 0.2^\circ\text{C}$, 0°C to 70°C

Description:

ATP assembly A1004AS20T1 is a general purpose thermistor probe for temperature sensing and is listed with Underwriters Laboratories (Certification file E193945). This sensor can be used to monitor air temperature or can be screw mounted for surface temperature measurement. The assembly consists of a highly stable NTC thermistor that is epoxied into an aluminum housing. The thermistor is a $10k\Omega$ thermistor with an accuracy of $\pm 0.2^\circ\text{C}$ from 0°C to 70°C . The sensor leads are AWG#20, teflon insulated UL rated wire. Sleeving is used to provide strain relief and to guarantee the UL rated 400 volt isolation between the sensor and the housing. The assembly is UL rated for operation to 105°C .



UL Listed Surface Temperature Sensor



Resistance vs. Temperature Data for ATP Part Number A1004AS20T1

Temp ($^\circ\text{C}$)	Res (Ω)	T_{ACCY} ($^\circ\text{C}$)	Temp ($^\circ\text{C}$)	Res (Ω)	T_{ACCY} ($^\circ\text{C}$)	Temp ($^\circ\text{C}$)	Res (Ω)	T_{ACCY} ($^\circ\text{C}$)	Temp ($^\circ\text{C}$)	Res (Ω)	T_{ACCY} ($^\circ\text{C}$)
-40	336,050	1.00	0	32,650	0.20	40	5,325	0.20	80	1,256	0.27
-35	242,397	0.90	5	25,394	0.20	45	4,367	0.20	85	1,070	0.30
-30	176,785	0.80	10	19,903	0.20	50	3,601	0.20	90	915.9	0.33
-25	130,295	0.70	15	15,714	0.20	55	2,985	0.20	95	786.8	0.37
-20	96,999	0.60	20	12,493	0.20	60	2,487	0.20	100	678.4	0.40
-15	72,906	0.50	25	10,000	0.20	65	2,082	0.20	105	587.1	0.45
-10	55,301	0.40	30	8,056	0.20	70	1,752	0.20			
-5	42,315	0.30	35	6,530	0.20	75	1,480	0.23			