

Figure 1.1. The physical photo of ATSC10KF1-L1

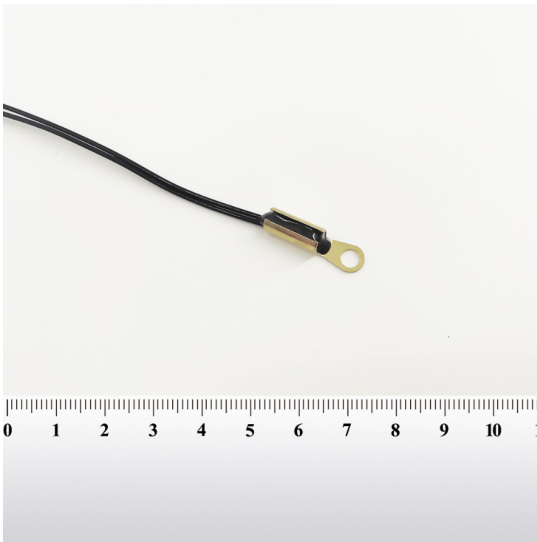


Figure 1.2. The physical photo of ATSC10KF1-L1

### MAIN FEATURES

- Glass Encapsulated for Long Term Stability & Reliability
- High Resistance Accuracy: 1%
- Maximum Temp. Range:  $-40^{\circ}\text{C}$  to  $200^{\circ}\text{C}$
- Packaged in Extra Small Ring Lug
- 100 % Lead (Pb)-free and RoHS Compliant

### APPLICATION AREAS

Temperature Sensing  
 Temperature Detection  
 Transformers  
 Electric Motors  
 Air Sensors

### DESCRIPTIONS

The ATSC10KF1-L1 is a thermistor assembly packaged in an extra compact ring lug. The thermistor inside has glass

encapsulation to ensure long time operation, wide temperature range, and no parameter drift of either short time or long term. The ring lug is made of metal, making them long time lasting even under harsh environment, such as acid, moisture, etc. The output terminals use a pair of heavy duty PVC insulated wires of 26 AWG. The ends are terminated by a standard 2 pin plug, which can be customized for other types of connectors according to customers need. The standard and length of the wires can also be specified.

### SPECIFICATIONS

Parameters	Value
Nominal Resistance @ $25^{\circ}\text{C}$	$10\text{K} \pm 1\%$
B Value @ $25^{\circ}\text{C} / 50^{\circ}\text{C}$	$3950\text{K} \pm 1\%$
B Value @ $25^{\circ}\text{C} / 85^{\circ}\text{C}$	$3990\text{K} \pm 1\%$
$R@25^{\circ}\text{C} / R@50^{\circ}\text{C}$	2.771
$R@25^{\circ}\text{C} / R@85^{\circ}\text{C}$	9.271
Ring Lug Length	$21 \pm 0.1\text{mm}$
Ring Lug Width	$6 \pm 0.1\text{mm}$
Ring Hole Diameter	$4 \pm 0.1\text{mm}$
Lead Diameter	1.5mm(26AWG)
Lead Length	90mm(can be customized)
Insulation Resistance	$50\text{M}\Omega$
Time Constant	37.8s (in still air) 1.13s (in water)

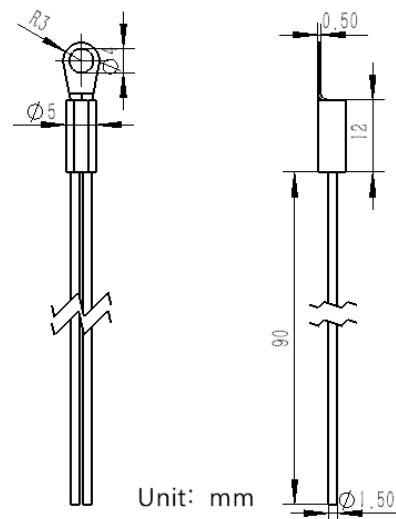


Figure 2. The Front and Side Views of ATSC10KF1-L1



Resistance Temperature Characteristics

Table with 10 columns: Temp (°C), Resistance (KΩ), Temp (°C), Resistance (KΩ), Temp (°C), Resistance (KΩ), Temp (°C), Resistance (KΩ), Temp (°C), Resistance (KΩ). Rows range from -40°C to 194°C.



Temp	Resistance	Temp	Resistance	Temp	Resistance	Temp	Resistance	Temp	Resistance
°C	KΩ	°C	KΩ	°C	KΩ	°C	KΩ	°C	KΩ
195	0.0706	211	0.0524	226	0.0402	241	0.0314	256	0.0248
196	0.0692	212	0.0514	227	0.0396	242	0.0309	257	0.0244
197	0.0679	213	0.0505	228	0.0389	243	0.0304	258	0.0241
198	0.0666	214	0.0496	229	0.0382	244	0.0299	259	0.0237
199	0.0654	215	0.0487	230	0.0376	245	0.0294	260	0.0234
200	0.0641	216	0.0479	231	0.0370	246	0.0290	261	0.0230
201	0.0630	217	0.0470	232	0.0364	247	0.0285	262	0.0227
202	0.0618	218	0.0462	233	0.0358	248	0.0280	263	0.0223
203	0.0606	219	0.0454	234	0.0352	249	0.0276	264	0.0220
204	0.0595	220	0.0446	235	0.0346	250	0.0272	265	0.0217
205	0.0584	221	0.0439	236	0.0340	251	0.0268	266	0.0214
206	0.0574	222	0.0431	237	0.0335	252	0.0264	267	0.0210
207	0.0563	223	0.0424	238	0.0329	253	0.0260	268	0.0207
208	0.0553	224	0.0416	239	0.0324	254	0.0256	269	0.0204
209	0.0543	225	0.0409	240	0.0319	255	0.0252	270	0.0201
210	0.0533								

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