Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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Nickel Thin Film Temperature Sensor

Nickel thin film elements are characterized by a relatively high temperature coefficient. Typical applications include bearing temperature monitoring, HVAC temperature monitoring, and stator winding temperature monitoring

Nominal Resistance R_0	Accuracy	Part Number
120 ohms at 0 °C	2 X DIN 43760	100 48 5-4

|	
Specification	ANSI
Temperature Range	-60 °C to +250 °C[*]
Temperature Coefficient	6720ppm/K
Lead wire material	Nickel
Protective coating	high-temperature epoxy
Self-heating	0,3K/mW in air
Response time	Water (v = 0,2m/sec.) $t_{0,9}$ = 0,3 sec. Air (v= 1m/sec.) $t_{0,9}$ = 9 sec.
Operating Current, Maximum	5 mA

Polynomial of the resistive characteristic:
$R(\vartheta) = R_0 \times (1 + 5,88\times10^{-3}\times\vartheta + 7,872\times10^{-6}\times\vartheta^2 + 4,71\times10^{-9}\times\vartheta^3)$

Maximum permissible tolerance as a function of temperature (accuracy defined as 2 x DIN 43760):
$\vartheta < 0°C$: $F = \pm(0,8 + 0,056 \times \vartheta)$ °C
$\vartheta > 0°C$: $F = \pm(0,8 + 0,014 \times \vartheta)$ °C
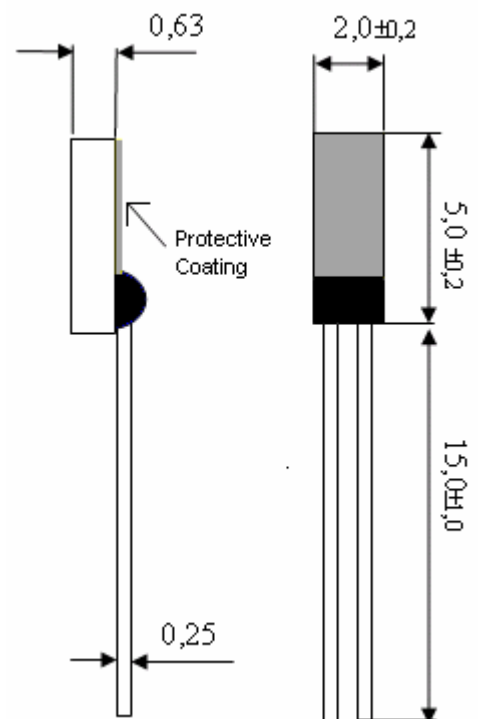
[*]At temperatures above 180 Deg. C. tensile loads on connection wires must be avoided for proper function.

All technical data serves as a guideline and does not guarantee any particular properties to the product.

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