

SENSOR_CNSE Series

Epoxy resin encapsulation structure



◆ Application Introduction

The thermistor sensor with an epoxy resin encapsulated head is an electronic measurement component that integrates temperature sensing with reliable protection. The core of this sensor is the thermistor chip, which is highly sensitive to temperature changes and efficiently converts temperature signals into resistance value signals. Epoxy resin, used as the encapsulation material for the head, possesses many excellent properties.

It is hard yet tough, providing solid physical protection for the thermistor chip, effectively resisting external mechanical shock, vibration, and abrasion, ensuring the chip's stability and reliability in complex environments.

Simultaneously, epoxy resin offers excellent electrical insulation, preventing electrical short circuits between the chip and the external environment, ensuring the sensor's normal operation.

Additionally, epoxy resin has good chemical stability, able to withstand corrosion from various chemicals, adapting to different working environments.

◆ Features

1. High temperature measurement accuracy
2. Small size
3. Fast response speed

◆ 应用

1. Air conditioning equipment
2. Heating equipment
3. Electronic thermometers
4. Automotive electronics
5. Electronic desk calendars
6. Mobile phone batteries

◆ 编码原则

1	2	3	4	5	6	7	8	9	10	11	12~18
Product Type			Series		Resistance Value		Resistance value accuracy		B value		Internal Control Code
CNS	NTC Chip	E0	105°C	Epoxy Resin Encapsulation Structure	103	10KΩ	F	±1%	34	B(25/85)=3435	
		E1	150°C		473	47KΩ	G	±2%	38	B(25/50)=3800	
		E2	80°C		502	5KΩ	H	±3%	39	B(25/50)=3950	
		E3	125°C				J	±5%	40	B(25/85)=4000	

◆ 规格

Part Number (Model No.)	Zero Power Resistance at 25°C (KΩ)	Tolerance of Resistance (±%)	B-Value (K)	Thermal Dissipation Constant (mW/°C)	Thermal Time Constant (s)	Operating Temperature Range (°C)
CNSKC202@MM	2	1,2,3,5	(B25/85)3530	≤ 3	≤ 10	-40°C ~ 150°C
CNSKC4A2@MM	4.7		(B25/100)3985			
CNSKC502@MM	5		(B25/50)3950			
CNSKC6A2@MM	6.8		(B25/50)3950			
CNSKC103@MM	10		(B25/85)3435			
CNSKC153@MM	15		(B25/50)4150			
CNSKC473@MM	47		(B25/50)3950			
CNSKC104@MM	100		(B25/85)3950			
CNSKC204@MM	200		(B25/50)3899			

K Customer application code May be A, E, F, G, H

C Temperature resistance rating:0(105°C)、1(150°C)、2(80°C)、3(125°C)

@ Resistance value accuracy:F:±1%; G:±2%; H:±3%; J:±5% or difference tolerance of the R25

MM B value