



## Standard Precision Interchangeable Thermistors **0.1°C and 0.2°C Accuracy**

U.S. Sensor's standard precision interchangeable thermistors are low cost, highly accurate, stable devices designed specifically for temperature sensing and control applications. They are particularly suited for uses where their precision interchangeability eliminates the necessity for costly individual circuit calibration.

### Company Information

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- Mission Statement
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### Product Guide

- NTC Thermistors
- NTC Probes & Assemblies
- RTD's
- RTD's Probes & Assemblies

### Technical Data

- What is a thermistor
- Terminology
- Manufacturing Quality

### Markets and Applications

### Find a Sales Rep/ Distributor

### Contact Us

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### U.S. Sensor

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### Features

- High accuracy
- Fast thermal response
- Low cost
- Small size
- Epoxy encapsulated
- High stability
- Long life
- R/T Curve-matched

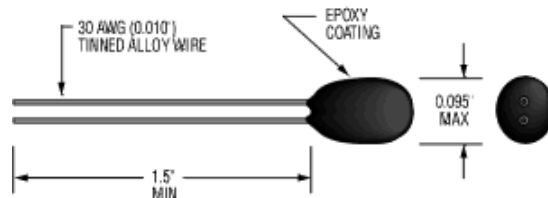
### Options

- Special lead materials and lengths
- Special encapsulants or probe housings
- Non-standard resistance values and tolerances

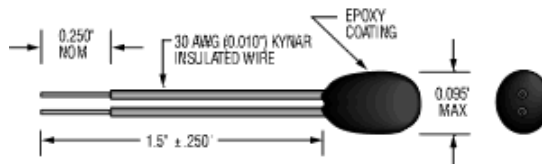
### Specifications

- Thermal time constant: 1 second max. in a well stirred oil bath, 10 seconds max. in still air
- Dissipation constant: 1 mW/°C
- Maximum power rating: 30 mW at 25°C derated to 1 mW at 125°C
- Interchangeability tolerance of  $\pm 0.1^\circ\text{C}$  or  $\pm 0.2^\circ\text{C}$  from 0-70°C
- Operating temperature: PS and PT series -80°C to +150°C, KS and KT series -80°C to +135°C
- Storage and operation temperatures for best long term stability: KT and PT series = -80° to +120°C, KS and PS series = -80° to +75°C

### "PS" & "PT" Series



### "KS" & "KT" Series



[View Photo](#)













### STANDARD PRECISION INTERCHANGEABLE THERMISTORS (135°C) $\pm 0.1^\circ\text{C}$ Accuracy - Insulated Leads

Part Number ( $\pm 0.1^\circ\text{C}$ 0-70°C)	Resistance Ohms@ 25°C	R-T Curve	Beta (K) 0-50°C	View R-T Chart
KS102J2*	1000	J	3890	
KS222J2	2252	J	3890	
KS302J2	3000	J	3890	
KS502J2	5000	J	3890	
KS602J2	6000	J	3890	
KS103G2	10000	G	3575	
KS103J2	10000	J	3890	
KS203J2	20000	J	3890	
KS303J2	30000	J	3890	
KS503J2	50000	J	3890	

KS503R2	50000	R	4140	
KS104R2	100000	R	4140	













\* 0.125" maximum diameter over epoxy coating

**STANDARD PRECISION INTERCHANGEABLE THERMISTORS (135°C)  
± 0.2°C Accuracy - Insulated Leads**

Part Number (±0.2°C 0-70°C)	Resistance Ohms@ 25°C	R-T Curve	Beta (K) 0-50°C	View R-T Chart
KT102J2*	1000	J	3890	
KT222J2	2252	J	3890	
KT302J2	3000	J	3890	
KT502J2	5000	J	3890	
KT602J2	6000	J	3890	
KT103G2	10000	G	3575	
KT103J2	10000	J	3890	
KT203J2	20000	J	3890	
KT303J2	30000	J	3890	
KT503J2	50000	J	3890	
KT503R2	50000	R	4140	
KT104R2	100000	R	4140	













\* 0.125" maximum diameter over epoxy coating

**STANDARD PRECISION INTERCHANGEABLE THERMISTORS (150°C)  
± 0.1°C Accuracy - Bare Leads**

Part Number (±0.1°C 0-70°C)	Resistance Ohms@ 25°C	R-T Curve	Beta (K) 0-50°C	View R-T Chart
PS102J2*	1000	J	3890	
PS222J2	2252	J	3890	
PS302J2	3000	J	3890	
PS502J2	5000	J	3890	
PS602J2	6000	J	3890	
PS103G2	10000	G	3575	
PS103J2	10000	J	3890	
PS203J2	20000	J	3890	
PS303J2	30000	J	3890	
PS503J2	50000	J	3890	
PS503R2	50000	R	4140	
PS104R2	100000	R	4140	

\* 0.125" maximum diameter over epoxy coating

**STANDARD PRECISION INTERCHANGEABLE THERMISTORS (150°C)  
± 0.2°C Accuracy - Bare Leads**

Part Number (±0.2°C 0-70°C)	Resistance Ohms@ 25°C	R-T Curve	Beta (K) 0-50°C	View R-T Chart
PT102J2*	1000	J	3890	
PT222J2	2252	J	3890	
PT302J2	3000	J	3890	
PT502J2	5000	J	3890	
PT602J2	6000	J	3890	
PT103G2	10000	G	3575	
PT103J2	10000	J	3890	
PT203J2	20000	J	3890	
PT303J2	30000	J	3890	
PT503J2	50000	J	3890	
PT503R2	50000	R	4140	
PT104R2	100000	R	4140	

\* 0.125" maximum diameter over epoxy coating

