



Precision Interchangeable Thermistors 0.5°C and 1.0°C Accuracy

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U.S. Sensor's 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.



Features

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

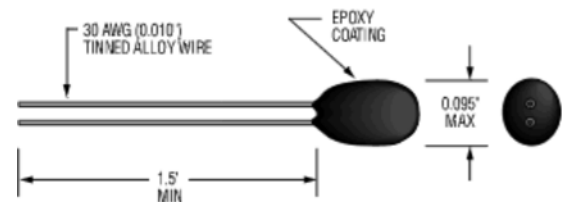
Options

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

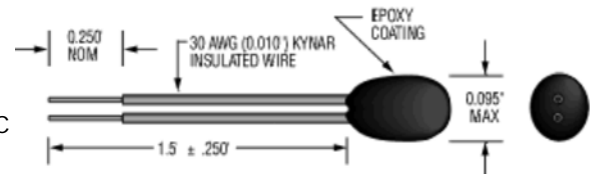
Specifications

- 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 ±0.5°C or ±1.0°C from 0-70°C
- Operating temperature: KW and KX series -80°C to +135°C, PW and PX series -80°C to +150°C
- Storage and operation temperatures for best long term stability: -80° to +120°C

"PW" & "PX" Series






"KW" & "KX" Series



[View Photo](#)













**PRECISION INTERCHANGEABLE THERMISTORS (135°C)
 ± 0.5°C Accuracy - Insulated Leads**

| Part Number (±0.5°C 0-70°C) | Resistance Ohms @25°C | R-T Curve | Beta (K) 0-50°C | View R-T Chart |
|--------------------------------|--------------------------|-----------|--------------------|-------------------|
| KW102J2* | 1000 | J | 3890 | |
| KW222J2 | 2252 | J | 3890 | |
| KW302J2 | 3000 | J | 3890 | |
| KW502J2 | 5000 | J | 3890 | |
| KW602J2 | 6000 | J | 3890 | |
| KW103G2 | 10000 | G | 3575 | |
| KW103J2 | 10000 | J | 3890 | |

| | | | | |
|---------|--------|---|------|---|
| KW203J2 | 20000 | J | 3890 |  |
| KW303J2 | 30000 | J | 3890 |  |
| KW503J2 | 50000 | J | 3890 |  |
| KW503R2 | 50000 | R | 4140 |  |
| KW104R2 | 100000 | R | 4140 |  |















* 0.125" maximum diameter over epoxy coating

**PRECISION INTERCHANGEABLE THERMISTORS (135°C)
± 1.0°C Accuracy - Insulated Leads**

| Part Number (±1.0°C 0-70°C) | Resistance Ohms @25°C | R-T Curve | Beta (K) 0-50°C | View R-T Chart |
|--------------------------------|--------------------------|-----------|--------------------|---|
| KX102J2* | 1000 | J | 3890 |  |
| KX222J2 | 2252 | J | 3890 |  |
| KX302J2 | 3000 | J | 3890 |  |
| KX502J2 | 5000 | J | 3890 |  |
| KX602J2 | 6000 | J | 3890 |  |
| KX103G2 | 10000 | G | 3575 |  |
| KX103J2 | 10000 | J | 3890 |  |
| KX203J2 | 20000 | J | 3890 |  |
| KX303J2 | 30000 | J | 3890 |  |
| KX503J2 | 50000 | J | 3890 |  |
| KX503R2 | 50000 | R | 4140 |  |
| KX104R2 | 100000 | R | 4140 |  |






* 0.125" maximum diameter over epoxy coating










**PRECISION INTERCHANGEABLE THERMISTORS (150°C)
± 0.5°C Accuracy - Bare Leads**

| Part Number (±0.5°C 0-70°C) | Resistance Ohms @25°C | R-T Curve | Beta (K) 0-50°C | View R-T Chart |
|--------------------------------|--------------------------|-----------|--------------------|---|
| PW102E3 | 1000 | E | 3263 |  |
| PW102J2* | 1000 | J | 3890 |  |
| PW222J2 | 2252 | J | 3890 |  |
| PW302J2 | 3000 | J | 3890 |  |
| PW502J2 | 5000 | J | 3890 |  |
| PW602J2 | 6000 | J | 3890 |  |
| PW103G2 | 10000 | G | 3575 |  |
| PW103J2 | 10000 | J | 3890 |  |
| PW203J2 | 20000 | J | 3890 |  |
| PW303J2 | 30000 | J | 3890 |  |
| PW503J2 | 50000 | J | 3890 |  |
| PW503R2 | 50000 | R | 4140 |  |
| PW104J2 | 100000 | J | 3892 |  |
| PW104R2 | 100000 | R | 4140 |  |

* 0.125" maximum diameter over epoxy coating

**PRECISION INTERCHANGEABLE THERMISTORS (150°C)
± 1.0°C Accuracy - Bare Leads**

| Part Number (±1.0°C 0-70°C) | Resistance Ohms @25°C | R-T Curve | Beta (K) 0-50°C | View R-T Chart |
|--------------------------------|--------------------------|-----------|--------------------|---|
| PX102E3 | 1000 | E | 3263 |  |
| PX102J2* | 1000 | J | 3890 |  |
| PX222J2 | 2252 | J | 3890 |  |
| PX302J2 | 3000 | J | 3890 |  |
| PX502J2 | 5000 | J | 3890 |  |

| | | | | |
|---------|--------|---|------|---|
| PX602J2 | 6000 | J | 3890 |  |
| PX103G2 | 10000 | G | 3575 |  |
| PX103J2 | 10000 | J | 3890 |  |
| PX203J2 | 20000 | J | 3890 |  |
| PX303J2 | 30000 | J | 3890 |  |
| PX503J2 | 50000 | J | 3890 |  |
| PX503R2 | 50000 | R | 4140 |  |
| PX104J2 | 100000 | J | 3892 |  |
| PX104R2 | 100000 | R | 4140 |  |

* 0.125" maximum diameter over epoxy coating

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