

Thermistor Temperature Sensors (Automobile use)

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Type: ERTSW, ERTSA

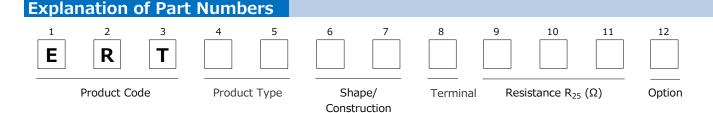
Used as a temperature detector for temperature control or temperature indication of heating parts for automobiles and industrial equipment. Due to its sealed construction and high vibration resistance, it has high precision in temperature detection. Various types are available in accordance with application.

Features

- Superior, high precision, temperature detection
- Highly reliable sealed construction
- High vibration resistance and easy installation
- ELV compliant

Recommended Applications

- Automobiles
- ●Boats
- Agricultural machines
- Boilers

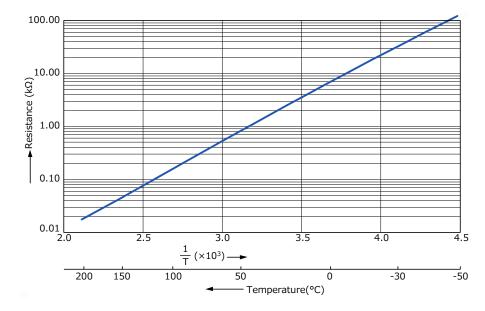


Ratings and	Characteristics		
Part No.	Water Temperature Sensor	Intake-air Temperature Sensor	Oil Temperature Sensor
	ERTSW06D□□□	ERTSA11D□□□	ERTSW04D□□□
Appearance			
Dimensions in mm (not to scale)	25 win w 25	φ20 φ10 φ10 φ12	17 17 17 17 10 10 10 10 10 10 10 10 10 10
Resistance	(Example) ERTSW06D202 Temperature ($^{\circ}$) (kΩ) -20±0.2 17.9±2.7 40±0.2 1.16±0.12 100±0.2 0.156±0.008	(Example) ERTSA11D202 Temperature ($^{\circ}$) (kΩ) -20±0.2 17.9±2.7 40±0.2 1.16±0.12 100±0.2 0.156±0.008	(Example) ERTSW04D222 Temperature ($^{\circ}$) Resistance ($^{\circ}$) ($^{\circ}$) -20±0.1 15.13±1.21 20±0.1 2.645±0.133 100±0.1 0.2156±0.0054 200±0.2 0.0283±0.0020
Heat Dissipation Constant	_	_	_
Maximum Permissible Power	10 mW	10 mW	10 mW
Operating Temperature Range	−30 to +120°C	-30 to +120°C	−30 to +200°C

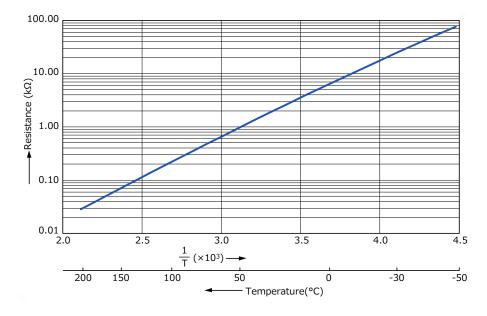


Resistance vs. Temperature

(Example) ERTSW06D202, ERTSA11D202



(Example) ERTSW04D222



Application Notes

- Using the sensor beyond the Maximum Permissible Power may generate excessive heat and deteriorate the performance and characteristics of the sensor.
- The rated Resistance Values are measured using specific testing circuits. Characteristics of the sensor vary when using other testing circuits in different conditions.
- Do not use the sensor beyond the Operating Temperature Range.
- Do not touch the terminal area when screwing the sensor. Impressing a strong force upon screws can damage the sensor and deteriorates its performance.
- Dropping or impressing a strong force may damage the sensor. Do not use the sensor if once dropped.

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