



SD-179 Silicon Diode Temperature Sensor

Introducing the SD-179 Silicon Diode Temperature Sensor: A new standard in high performance and economical cryogenic thermometry only from CryoTechnics!

Uncompromising Design for Demanding Applications

The Model SD-179 silicon diode cryogenic thermometer represents the latest advances in ultrafast miniature sensing devices for extremely low temperature applications. The SD-179 is guaranteed to be compatible with your existing instrumentation or signal conditioning. Better yet, ask us about our upcoming signal conditioning products for a complete solution!

Accuracy at Any Budget

The budget-friendly SD-179 has been developed with interchangeability in mind, and is available in standard tolerance groups. For even greater accuracy needs, we provide custom sensor calibrations.

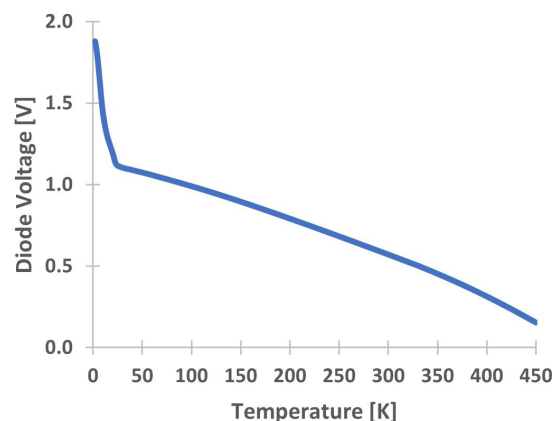
Complete Customizability

Do you need a specialized mount, UHV electrical feedthrough, ruggedized process or aerospace thermowell housing, or other custom package? We do that, too!

SD-179 Specifications

Sensor Type	Diode-connected bipolar junction transistor
Recommended excitation	10 μ A
Maximum Reverse Voltage	50 V
Interchangeability	SD-179 Standard Response Curve
Repeatability	Better than ± 5 mK at 4.2 K
Temperature Response [V] 1.5 4.2 K 77.4 K 273.2 K	1.89 1.79 1.03 0.63
Accuracy Group [\pm K] 2-100 K 100-300 K 300-450 K	A' ± 0.15 ± 0.25 ± 0.25 A ± 0.25 ± 0.5 ± 0.5 B ± 0.5 ± 0.5 ± 1 C ± 1 ± 1 ± 2
Standard Housing	Miniature TO-type probe, gold-plated OFHC copper, dim. 0.2 in (L) X 0.1 in (dia.)
Optional Housings	Bobbin, gold-plated OFHC copper Al ₂ O ₃ surface mount w/ back metallization
Range of Use	1.5 K to 400 K

SD-179 Voltage at 10 μ A





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