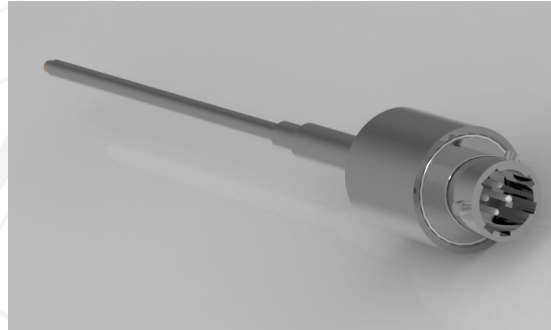
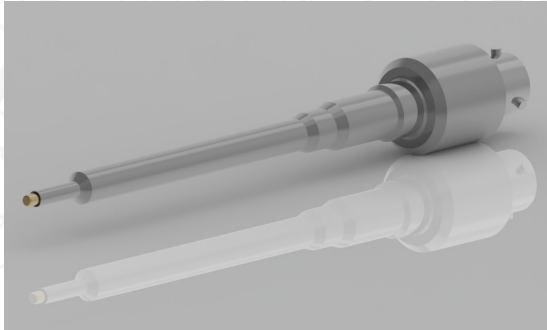


# Models 100071 & 100072 Cryogenic Temperature Probes

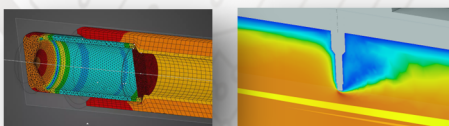


## Industry-Leading Performance & Customizability

The CryoTechnics Models 100071 & 100072 are high-precision cryogenic temperature probes featuring a silicon diode sensor hermetically encapsulated in a rugged housing. Designed for extreme environments, the probes offer excellent repeatability, rapid thermal response, and interchangeability with the CT SD-179 sensor. Standard models include 1/8" or 1/4" stems with custom lengths and process connection fittings available to suit diverse system requirements.

## Advanced Engineering Support for Mission Success

CryoTechnics supports application-specific integration by offering design and advanced simulation capabilities, including finite element analysis (FEA), computational fluid dynamics (CFD), and thermal modeling services. These tools ensure optimized system-level performance in cryogenic ground control systems and avionics.



PROBE SPECIFICATIONS	
ELECTRICAL	
Sensor Type	Diode-connected bipolar junction transistor
Recommended excitation [ $\mu$ A]	10
Maximum Reverse Voltage [V]	50
Interchangeability	SD-179 Standard Response Curve
Nominal V(T) Response [V] 1.5 K   4.2 K   77.4 K   273.2 K	1.89   1.79   1.03   0.63
Connection	MIL-DTL-26482 Bayonet, 4-pin
THERMAL	
Repeatability	Better than $\pm 10$ mK at 4.2 K
Thermal Response [msec]	100 or better depending on process conditions
Accuracy Groups [ $\pm$ K] 2-25 K   25-300 K   300-400 K	A' $\pm 0.15$   $\pm 0.25$   $\pm 0.25$ A $\pm 0.25$   $\pm 0.5$   $\pm 0.5$ B $\pm 0.5$   $\pm 0.5$   $\pm 1$ C $\pm 1$   $\pm 1$   $\pm 2$
PHYSICAL	
Probe Housing	Stainless Steel (304); Exposed sensing capsule (gold-plated OFHC copper)
Probe Mass [g]	50
Insertion Length	3 in.; Custom lengths available
Process Connection	1/8 in. (100071) or 1/4 in. (100072) compression; AS-threaded available
Pressure Capability	20.7 barg (300 psig); Consult factory for higher pressure applications