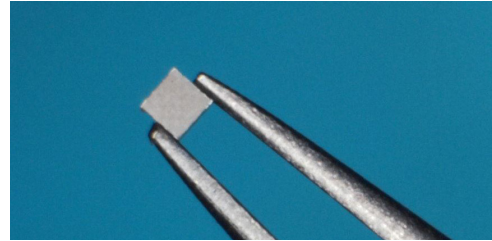




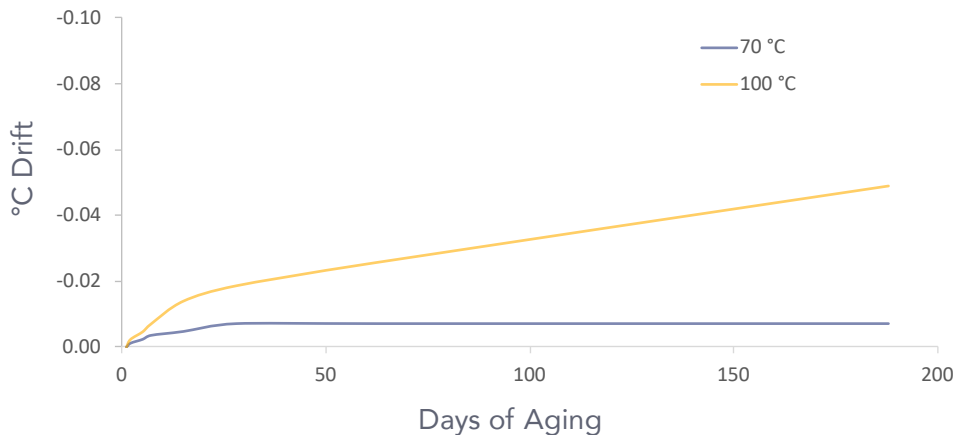
Leadless NTC Thermistor Stability Study

Summary:

Leadless NTC thermistors in a hermetically sealed package were measured for drift in an accelerated aging study. They were found to have excellent stability and easily met the requirement of minimal drift.



Thermistor Drift at 70 °C and 100 °C



An accelerated aging study was conducted to determine if North Star Sensors' leadless NTC thermistor would be suitable for an infrared detector application with long term storage at 55 °C. The thermistors were mounted in a hermetically sealed TO-18 package with an inert gas atmosphere. Samples were placed in a 70 °C and 100 °C oven for multiple months and measured at intervals. At 70 °C there was an almost imperceptible amount of drift, while at 100 °C the drift was minimal.

The parts were found to have excellent stability and easily met the minimum drift requirement for this application.

Part number used in study:

Part Number	Resistance at 25 °C	Resistance Tolerance	Die Size L x W x H	R/T Curve	25 °C / 85 °C β
A1B303R43P5W	30 k Ω	$\pm 5\%$ at 25 °C	0.027" x 0.027" x 0.011" (0.69 x 0.69 x 0.28 mm)	43	3943