Si415

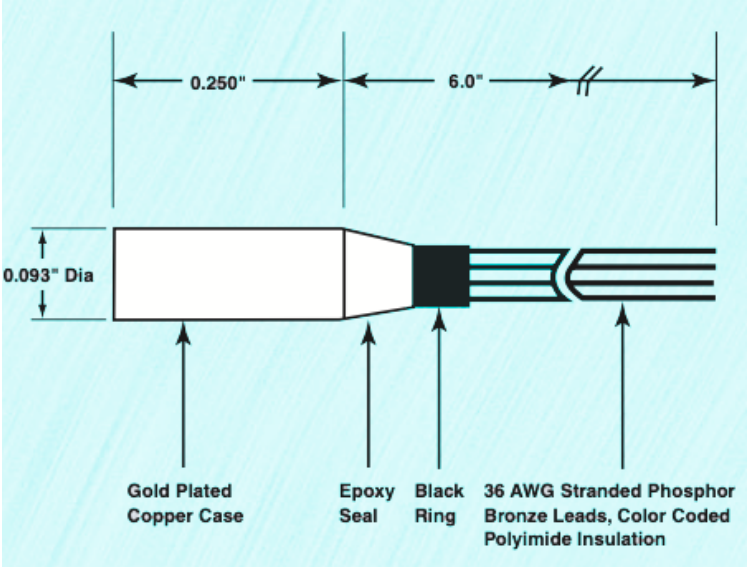
SCIENTIFIC INSTRUMENTS

SILICON DIODE CRYOGENIC TEMPERATURE SENSOR

The Scientific Instruments Model Si-415 Silicon Temperature Sensors operate over a wide temperature range (1.5K to 450K) and are miniature in size. They are linear over a wide temperature range interval and have high sensitivity in their lower range. The silicon diode temperature sensors are interchangeable to a standard V/T curve.

Model Si-415 and Si-420 sensors are normally mounted in a gold-plated copper case with four 36 AWG polyimide coated, color-coded, phosphor bronze leads. Case size is 0.093″ diameter by 0.250″ long. Special leads of phosphor bronze or manganin wire at various lengths can be furnished at a minimum additional cost. Other packages can be supplied, contact us for details.

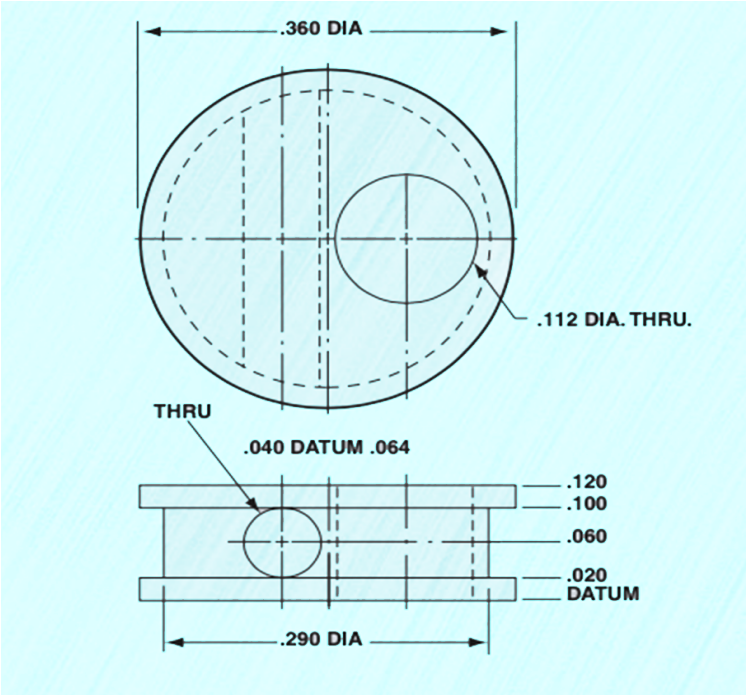
Standard Configuration



Si415 interchangeable Diode

Accuracy	
Group A	+/- .3K from 1.5K to 25K +/- .5K from 25K to 450K
Group D	+/- .5K from 1.5K to 450K
Group AA	+/- .1K from 1.5K to 25K +/- .5K from 25K to 450K

Model 22 BOBBIN



Si 420 Industrial Diode

All Si420 sensors have the following accuracy:

± 2K from 4K to 25K
± 5K from 25K to 450K

ISO 9001 REGISTERED

Si415

CRYOGENTIC TEMPERATURE SENSOR SILICON DIODE THERMOMETER

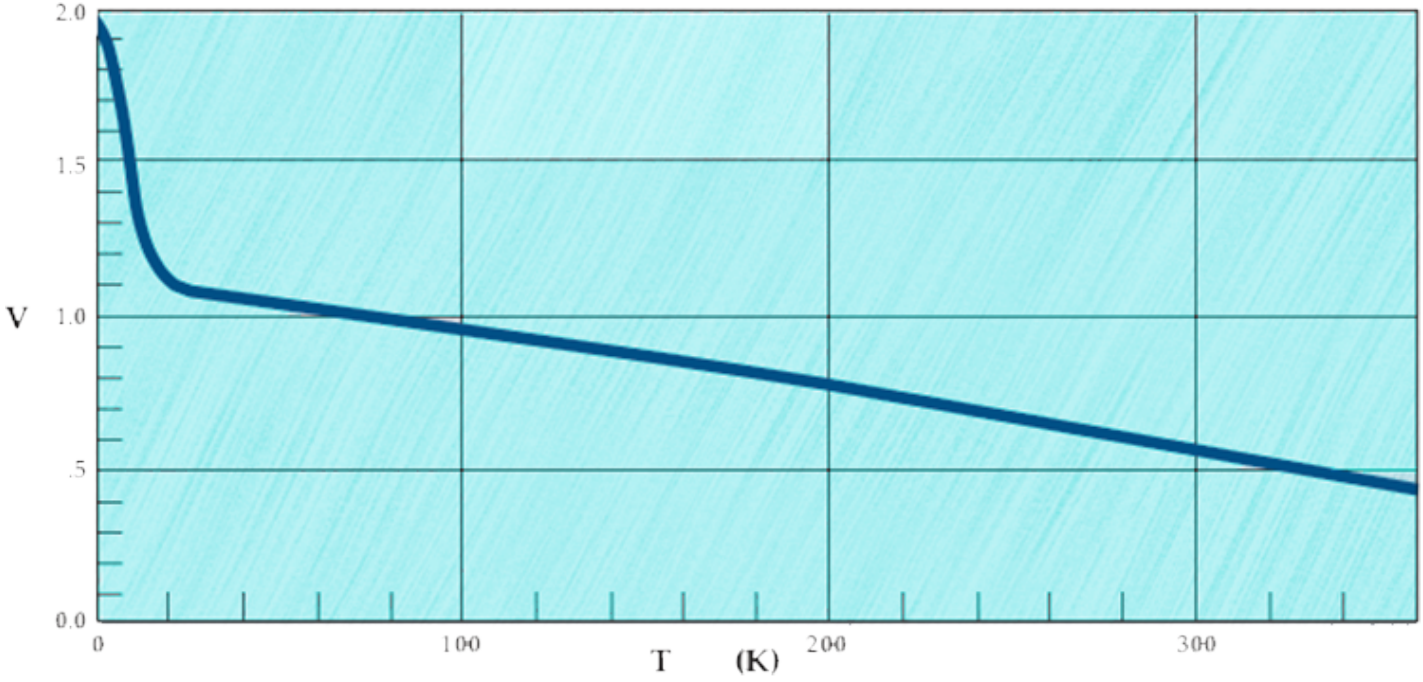
Typical Response Curve

Reference Standards for Temperature Measurements: 1.5K-100K – Germanium – NIST Calibrated

Silicon Diode Thermometer

Calibration Current: 10 microamps

MODEL Si415 TYPICAL RESPONSE



Notes:

1. Model Si415 and Si420 sensors are normally mounted in a gold-plated copper case with 4 each 36 AWG Polyimide insulated, color-coded, phosphor bronze leads. Case size is 0.093" diameter by 0.250" long.
Other packages can be supplied; consult the factory.

2. Individual Model Si415 sensors can be calibrated at 10 or 100 microamps over various standard temperature ranges (see price sheet for ranges) at the following accuracies:

± 0.03K from 1.5K to 25K
± 0.10K from 25K to 450K