

T H E R M O M E T R I C S
A C O M M I T M E N T T O E X C E L L E N C E

NTC Interchangeable Type SC Series Thermometrics Thermistors



Features

- Precision, solid state temperature sensor
- Epoxy filled sleeve for controlled diameter
- Interchangeability down to $\pm 0.18^{\circ}\text{F}$ ($\pm 0.10^{\circ}\text{C}$)
- Suitable for use over the range of -40°F to 302°F (-40°C to 150°C)
- High sensitivity greater than $-4\%/^{\circ}\text{C}$ at 77°F (25°C)
- Most popular Resistance (R) vs Temperature (T) curves are available
- Suitable for temperature measurement, control and compensation
- Ideal for medical applications
- Fully insulated
- Sleeved for good mechanical strength and resistance to solvents
- 0.008 in (0.2 mm) diameter heavy isomid insulated bifilar copper lead wires for SC50
- 0.004 in (0.1 mm) diameter heavy isomid insulated bifilar nickel lead wires for SC30

Amphenol
Advanced Sensors

Type SC30 Specifications

NTC Interchangeable Type SC30

Sleeved interchangeable chip thermistors with heavy isomid insulated nickel lead-wires.

Options

Consult Factory for Availability of Options

- Other resistance values in the range of 1000 Ω to 100 k Ω
- Other tolerances or ranges
- Alternative lead wires or lengths
- Non standard R vs T curves
- Controlled dimensions

Thermal and Electrical Properties

Dissipation Constant

Still air: 0.4 mW/ $^{\circ}$ C
 Stirred oil: 3 mW/ $^{\circ}$ C

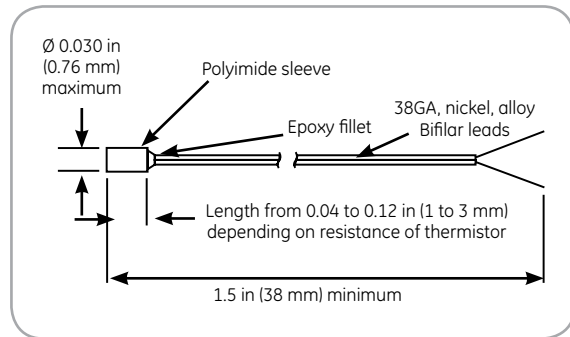
Thermal Time Constant

Still air: 5 seconds
 Stirred oil: 0.3 seconds

Maximum Power at 77°F (25°C)

~30 mW

De-rated from 100% at 77°F (25°C) to 0% at 212°F (100°C)



NTC Interchangeable Type SC30 dimensions

Ordering Information

Select appropriate part number below for resistance and temperature tolerance desired.

$R_{25^{\circ}\text{C}}$	Material System	$\pm 0.18^{\circ}\text{F}$ ($\pm 0.1^{\circ}\text{C}$) 32°F to 158°F (0°C to 70°C)	$\pm 0.36^{\circ}\text{F}$ ($\pm 0.2^{\circ}\text{C}$) 32°F to 158°F (0°C to 70°C)
2252	F	SC30F232V	SC30F232W
3000	F	SC30F302V	SC30F302W
5000	F	SC30F502V	SC30F502W
10000	F	SC30F103V	SC30F103W
10000	Y	SC30Y103V	SC30Y103W
30000	H	SC30H303V	SC30H303W
50000	G	SC30G503V	SC30Y503W
100000	Y	SC30Y104V	SC30Y104W
100000	G	SC30G104V	SC30G104W

Notes:

1. For RoHS compliant product, please add the suffix "N" to the part label. *Example: SC30F103VN*
2. For RoHS compliant product with applications below 0°C, please add the suffix "H" to the part label. *Example: SC30F103VH*

Type SC50 Specifications

NTC Interchangeable Type SC50

Sleeved interchangeable chip thermistors with heavy isomid insulated copper lead wires.

Options

Consult Factory for Availability of Options.

- Other resistance values in the range of 1000 Ω to 100 k Ω
- Other tolerances or ranges
- Alternative lead wires or lengths
- Non standard R vs T curves
- Controlled dimensions

Thermal and Electrical Properties

Dissipation Constant

Still air: 0.5 mW/ $^{\circ}$ C
Stirred oil: 0.4 mW/ $^{\circ}$ C

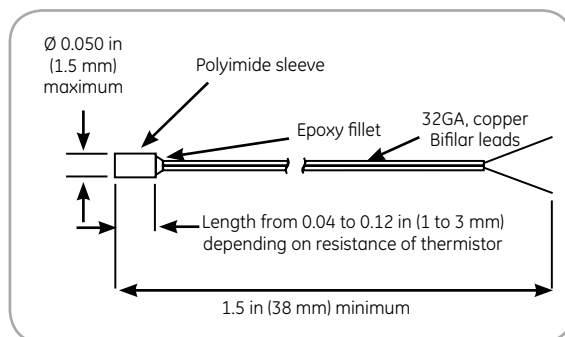
Thermal Time Constant

Still air: 8 seconds
Stirred oil: 0.5 seconds

Maximum Power at 77°F (25°C)

~50 mW

De-rated from 100% at 77°F (25°C) to 0% at 212°F (100°C)



NTC Interchangeable Type SC30 dimensions

Ordering Information

Select appropriate part number below for resistance and temperature tolerance desired.

$R_{25^{\circ}\text{C}}$	Material System	$\pm 0.18^{\circ}\text{F}$ ($\pm 0.1^{\circ}\text{C}$) 32°F to 158°F (0°C to 70°C)	$\pm 0.36^{\circ}\text{F}$ ($\pm 0.2^{\circ}\text{C}$) 32°F to 158°F (0°C to 70°C)
2252	F	SC50F232V	SC50F232W
3000	F	SC50F302V	SC50F302W
5000	F	SC50F502V	SC50F502W
10000	F	SC50F103V	SC50F103W
10000	Y	SC50Y103V	SC50Y103W
30000	H	SC50H303V	SC50H303W
50000	G	SC50G503V	SC50Y503W
100000	Y	SC50Y104V	SC50Y104W
100000	G	SC50G104V	SC50G104W

Notes:

1. For RoHS compliant product, please add the suffix "N" to the part label. Example: SC50F103VN
2. For RoHS compliant product with applications below 0°C, please add the suffix "H" to the part label. Example: SC50F103VH

Amphenol

Advanced Sensors

www.amphenol-sensors.com

© 2014 Amphenol Corporation. All Rights Reserved. Specifications are subject to change without notice.
Other company names and product names used in this document are the registered trademarks or
trademarks of their respective owners.

AAS-920-307D-11/2014