

SSTS SERIES

Solid State

Temperature Switch

NEW PRODUCT



SSTS shown prior to encapsulation and as a finished assembly.

DESCRIPTION

The standard SSTS functionality combines a highly accurate temperature sensor and a switch in a low cost, compact, rugged unit. Temperature is monitored using a thermistor configured with precision matched thick film resistors in a bridge configuration. The module also contains the control and amplifier electronics necessary to drive a relay, used to switch motors or valves to control the temperature in a system. The external load is driven by the SSTS output transistor. The circuit can be tailored for different input voltages, such as 12 Vdc, ideally suited for automotive HVAC applications. The module "trips" at a desired set point, and resets at an upper trip point established by the hysteresis parameter (+1.5°C typical).

The module is designed with a "nose" protrusion that extends into the flow path of the medium being measured.

This is typically placed in the evaporator of an air conditioning unit. The electrical interface consists of +Vin, Ground, and Output. The modules are constructed using hybrid technology on a ceramic substrate.

The SSTS is exclusively available for customer specific applications. The following design parameters need to be specified by the customer:

- Lower temperature trip point
- Upper temperature trip point
- Output drive requirement
- "Nose" configuration
- Attachment configuration
- Socket/connector interface configuration.
- Nominal and min./max. supply voltage

ELECTRICAL

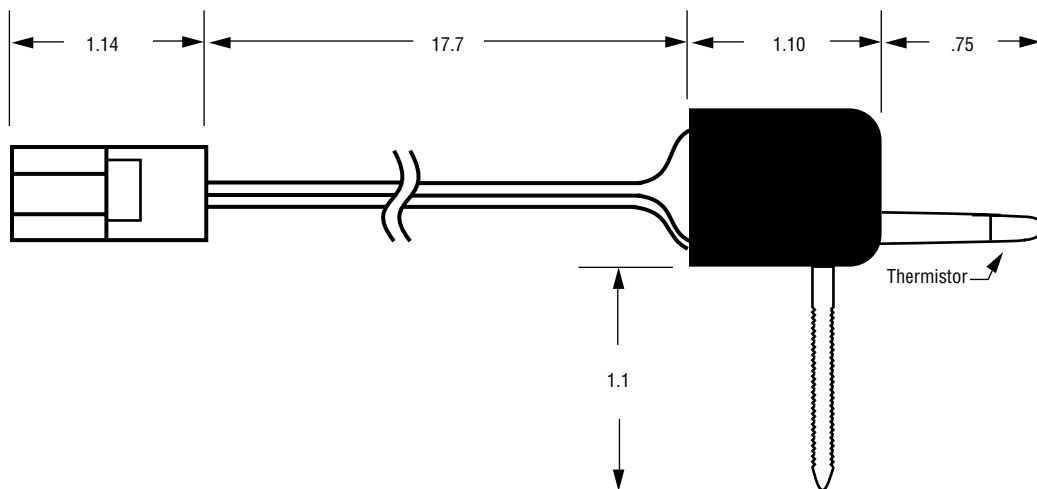
Parameter	Conditions	Min.	Typ.	Max.	Units
Input Voltage		9	12	16	Vdc
Quiescent Current	Vin = 12V		10		mA
Trip Point		Nom. -0.5	*	Nom. +0.5	°C
Hysteresis			**		°C
Output Saturation	Ic = 150mA			0.3	V
Operating Temperature		-40		+85	°C

* Trip point available in 0.5°C increments.

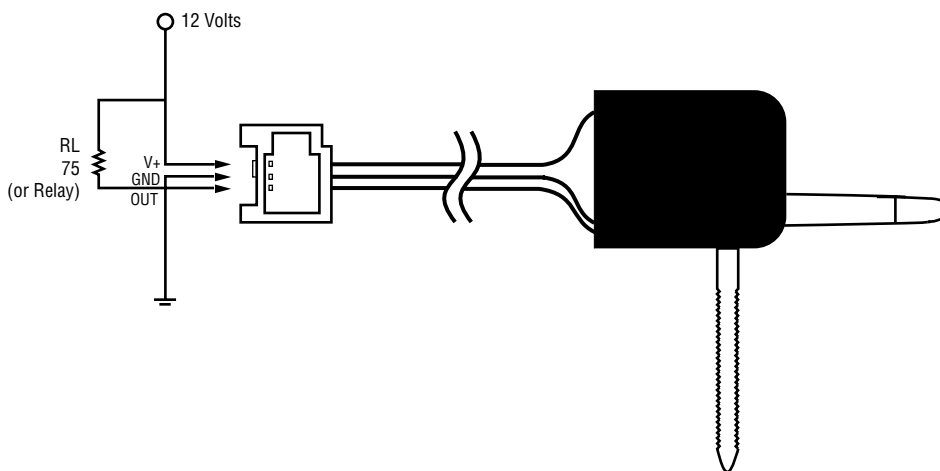
** Custom Hysteresis settings are available (1.5°C typical).

Specifications subject to change without notice.

TYPICAL CONFIGURATION



TYPICAL INTERCONNECT



ORDERING INFORMATION

For pricing, technical support and sample requests contact your local BI Technologies representative or customer service at (714) 447-2345, Fax (714) 447-2500 or by email: sales.micro@bitechnologies.com