

AIRPAX® | 6600 Series

8-Pin DIP, Subminiature Bimetal Disc Thermostat

FEATURES

- RoHS compliant per EU directive 2002 / 95 / EC
- 8-pin DIP international electronic package standard
- Ideal for surface and air sensing on PC boards

- · Gold-plated contacts
- Up to 30,000 life cycles @ max standard amperage (120VAC)
- Up to 100,000 life cycles @ max gold contact amperage

DESCRIPTION

The Airpax™ 6600 series is a RoHS compliant, positive snap action, single pole / single throw, sub-miniature bimetallic thermostat which provides accurate and reliable sensing and switching in a single device.

The 6600 series thermostat dimensionally conforms to the international product package standard 8-pin DIP (N8A Dual Inline Package). The 6600 is ideally suited for use on printed circuit boards. Its size and shape conserves space on crowded PC boards and can be installed using auto-insertion equipment. The device is sealed to withstand wave soldering and board washing operations.

The 6600 provides fast, positive response with excellent repeatability. The thermostat has a switch capability of up to 1 amp for 48 VDC or 120 VAC, and achieves low-level switching down to 0.001 A to 0.020 A at 5 VDC for 100,000 cycles. Temperature is pre-set at the factory and is non-adjustable in the field.

Applications include computers and computer peripherals, aircraft, automotive and test equipment. Typical uses include turning on an indicator light, sounding an audible alarm, switch on a control circuit to send a message to a display screen or even switching a circuit to shut down a system.

The 6600 thermostat is temperature tested in a computer controlled automated test equipment air-oven. Due to the ideal conditions under which it is tested, independent customer testing may be necessary to ensure that the correct calibration is utilized in the application.

It is the customer's responsibility to determine whether the product is proper for customer's use and application.

OPERATION SCHEMATICS

Schematic for Open on Rise Operation

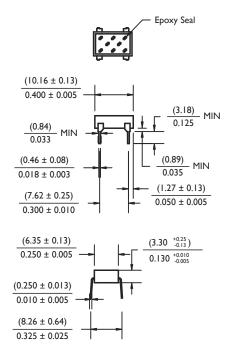
Schematic for Close on Rise Operation

SPECIFICATIONS

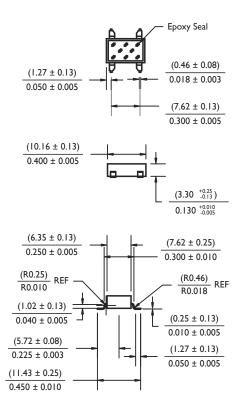
Contact Resistance	50 milliohms max (before and after rated life)		
Contact Ratings	Cycles Voltage Amps (resistive) 25,000 48 VDC 1.0 30,000 120 VAC 1.0 100,000 5 VDC 0.001 (gold)		
Contact Operations	Either close on rise (make) or open on rise (break)		
Operating Temperature	40°C to 130°C (104°F to 266°F)		
Temperature Tolerance	Standard of ±5°C (±9°F) with nominal operating temperature settings in 5°C increments		
Short Term / Long Term Exposure Limit	Short = 260°C (500°F), 10 second duration Long = -55°C to 160°C (-67°F to 320°F)		
Dielectric Strength	1480 VAC 60Hz, 1 second duration terminals to case		
Insulation Resistance	100 Mohms at 500 VDC		
Contact Bounce	3 milliseconds max (make)		
Vibration	Per Mil-Std-202, method 204D, test condition D, 10 to 2,000 Hz		
Shock	Per Mil-Std-202, method 213, test condition C, 100 G's for 6 millisecond duration, ½ sine wave		
Seal	High temperature epoxy sealed for wave soldering and cleaning, moisture proof per Sensata specification S-722 (unit will not leak while submerged in 9" of water for a minimum of two minutes)		
Base Material	PPS (Polyphenylene Sulfide), 94 VO rated		
Terminal Material	65% Copper, 18% Nickel		
Contact Material	Gold-plated or overlay, silver crossbar		
Chemical Resistance	Unit is resistance to water, salt, alcohol, ammonia, trichlorethane and most other organic solvents		
Soldering Heat Resistance	Per Mil-Std-202F, method 210A, test condition E		
Weight	Approximately 0.45 grams		
Mechanical Life	1,000,000 operations		
Agency Approvals	сЯUus recognized E36687 VDE approval 0631/12.83 RoHS Compliant per EU Directive 2002/95/EC		

DIMENSIONAL SPECIFICATIONS, inches [mm]

Standard 8-Pin DIP Configuration

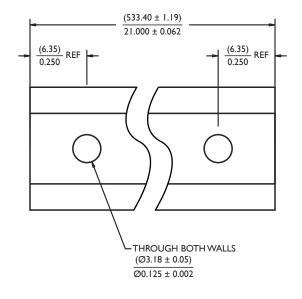


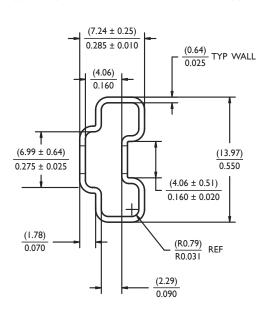
Surface Mount (Gullwing, SMT) Configuration



STANDARD PACKAGING

Standard and surface mount samples and production orders will be shipped in plastic, industry standard DIP shipping tubes.





35

STANDARD TEMPERATURE CALIBRATION TABLE

Each thermostat part number consists of functional "building blocks" to enable the user to specify clearly and precisely the desired characteristics in each category. Select the proper code in each category, then transfer it to the box indicated. Unless a special requirement is indicated, the part number will be complete when the proper temperature is selected. If you have a special requirement, please call Sensata for a factory assigned number to complete the part number.

Example:

A 66F095 thermostat will close (make contact) on a rising temperature from 90°C to 100°C and will reset open (break contact) on a falling temperature within a window of no greater than 6°C lower than the actual close temperature and no less than 60°C ambient temperature.

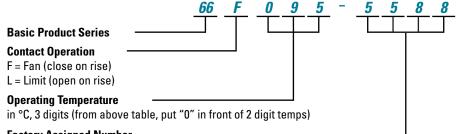
Special requirements require a 4 digit manufacturing dash number for ordering special features, 4 digit marking may not appear as part of the marking on the thermostat.

Special requirements may include VDE, $\pm 3.0^{\circ}$ C ($\pm 5.4^{\circ}$ F) operating temperature tolerance, or surface mount (gullwing, SMT).

Temperature set point calibration is checked at Sensata Technologies with precision test equipment traceable to the US National Institute of Standards and Technology and Proven Methods. Because customer checking methods may differ, a typical variance allowed for correlation is $\pm 1.1^{\circ}$ C ($\pm 2.0^{\circ}$ F).

OPERATE (±5°C)	MIN DIFFERENTIAL (°C)	MIN RESET (°C)
40	4	20
45	4	20
50	4	30
55	4	30
60	4	40
65	4	40
70	4	50
75	4	50
80	6	55
85	6	55
90	6	60
95	6	60
100	6	70
105	6	70
110	6	80
115	6	85
120	9	90
125	9	90
130	9	90

DECISION TABLES



Factory Assigned Number

Nondescript, 4 digit dash number assigned for a customer's special requirements. The dash and factory assigned number is not required for ordering a standard product

©2013 Sensata Technologies, Inc. All rights reserved worldwide. The following data sheet is an excerpt from our Airpax™ Power Protection Catalog, **Literature # 2455005000**, printed in the USA, **May 9th, 2013**.

Important Notice: Sensata Technologies reserves the right to make changes to, or to discontinue, any product or service identified in this publication without notice. Before placing orders, users should obtain the latest version of the relevant information to verify that the information being relied upon is current.

Sensata Technologies assumes no responsibility for customers' product designs or applications. Users must determine the suitability of the Sensata device described in this publication for their application, including the level of reliability required. Many factors beyond Sensata's control can affect the use and performance of a Sensata product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. As these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the Sensata product to determine whether it is fit for a particular purpose and suitable for the user's application.

Sensata Technologies products are sold subject to Sensata's Terms and Conditions of Sale which can be found at: www.sensata.com/terms.htm



Sensata Technologies Inc. 529 Pleasant Street Attleboro, MA 02703, USA Phone: +1 508-236-3287

http://airpax.sensata.com/

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Thermostats category:

Click to view products by Sensata manufacturer:

Other Similar products are found below:

M24236/1-JFKFF 66F060-0099 66L085-0477 67F080-0356 67L060-0368 67L080-0038 77877-00 A1014005 ASP200-22 1F78-151CB

1NT08L-7399 O54EAB240B-215Y C53GAB101A-081A 22636-00 2450 00210626 2450 00880010 2450CM 80020691 2450RC 79080002

2455R--01000844 2455R 80580176 2455R--90820376 2455R--90820597 2455RA-94170955 2455RC-00980620 2455RCG81170352

2455RM03090005 2455RM 80820736 2455RP-91000430 2455RP-91000433 2455RP-91000442 300004500021 300004520005

300004530001 300005510137 300005510148 300100240216 300100630004 3001 00830006 A1006505 2450 06180001 2450G 83950014

2450RC-90820307 2455R--00030829 2455R--01000140 2455R 01060062 2455R 86890009 2455R--99130436 2455RA-04170929 2455RC-01000545 PN14-6R