DUAL TRIP TEMPERATURE SWITCH IC

The S-5842A Series is a dual trip temperature switch IC which detects two points of temperature.
The S-5842A Series operates with a low supply voltage down to 2.5 V, and it has low current consumption of 10 μA typical.
The S-5842A Series consists of a negative coefficient temperature sensor, a reference voltage generation circuit, and a comparator integrated in a single IC.
The package options are the SNT-6A and SOT-23-6.

■ Features

- Range of detection temperature : −10°C to +110°C, 1°C step
- Accuracy of detection temperature : ±2.5°C (is set only for either detection temperature)
- Operation with low voltage : V_{DD} (min.) = 2.5 V (Detection temperature = +20°C to +110°C)
  V_{DD} (min.) = 2.7 V (Detection temperature = 0°C to +110°C)
  V_{DD} (min.) = 2.8 V (Detection temperature = −10°C to +110°C)
- Low current consumption : 10 μA typ. (Ta = +25°C)
- The range of operation temperature : −40°C to +125°C
- Selectable output type, logic and form
- Lead-free, Sn 100%, halogen-free*1

***1.** Refer to "■ **Product Name Structure**" for details.

■ Applications

- Fan control
- Air-conditioning system
- Mobile phones
- Game consoles
- Various electronics devices

■ Packages

- SNT-6A
- SOT-23-6

■ Block Diagram

1. S-5842A with CMOS output (output : Separate type)

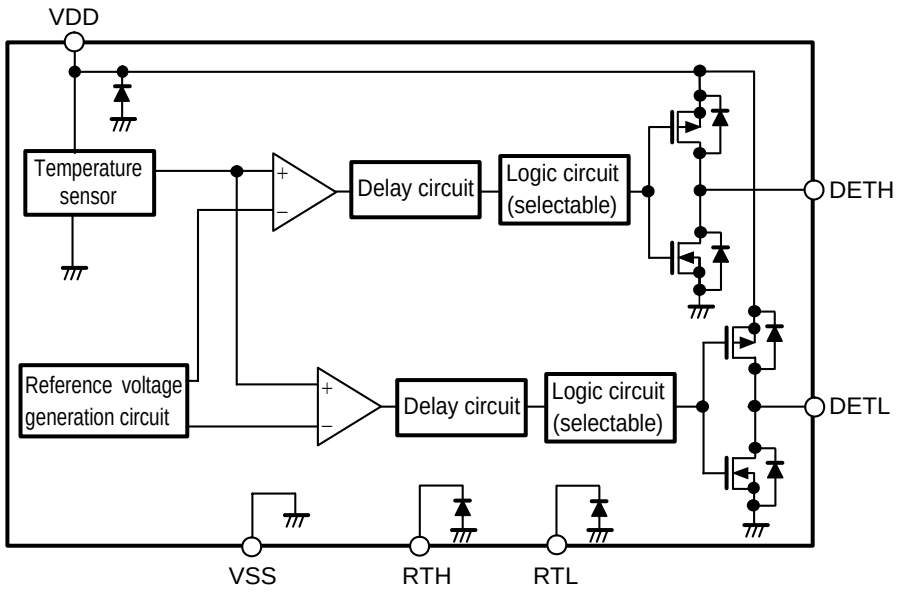


Figure 1

2. S-5842A with Nch open drain output (output : Separate type)

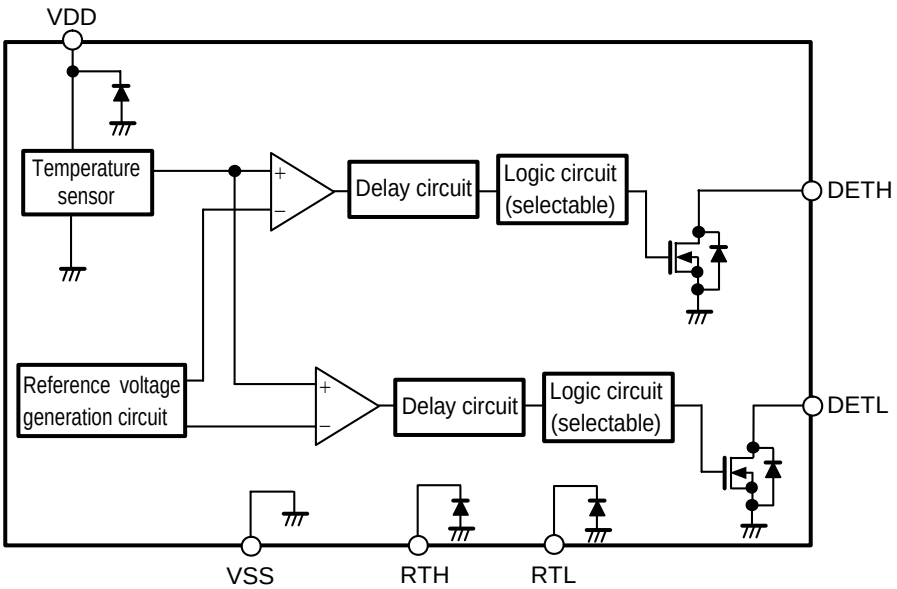


Figure 2

3. S-5842A with CMOS output (output : Integrate type)

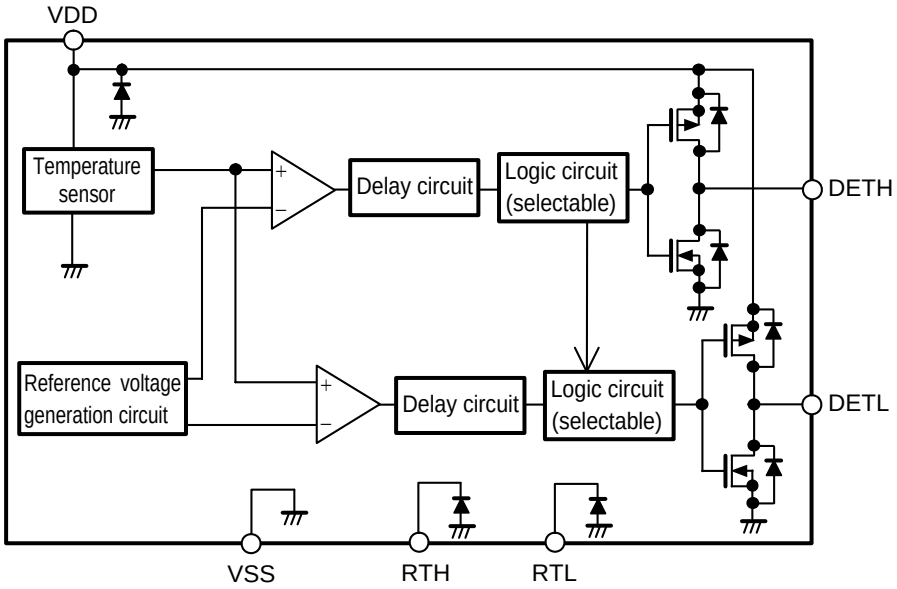


Figure 3

4. S-5842A with Nch open drain output (output : Integrate type)

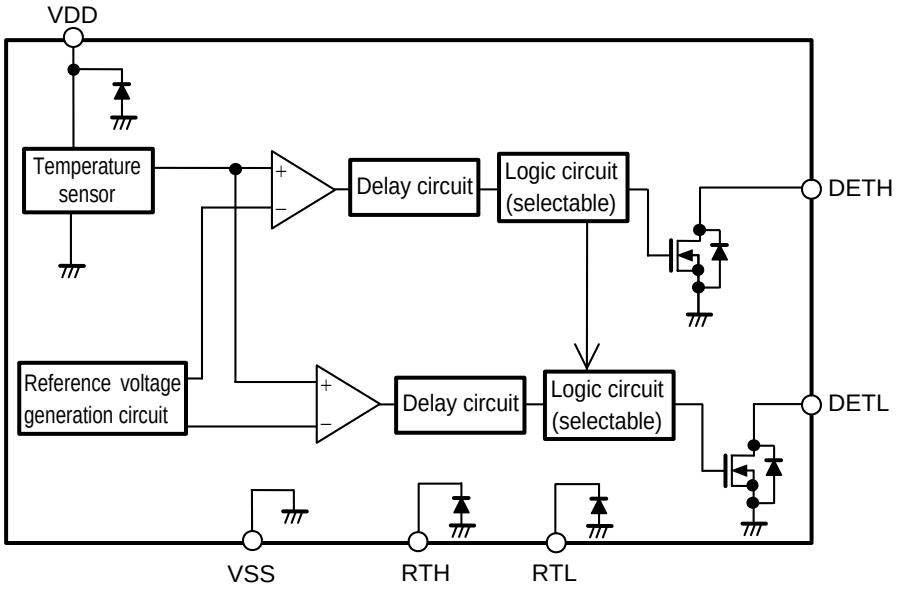


Figure 4

■ Product Name Structure

Users are able to select the output form and type, option for detection temperature's spec and package for the S-5842A Series.

1. Product Name

(1) SNT-6A

S – 5842A x xxx – xxxx x

- Environmental code
  - U: Lead-free (Sn 100%), halogen-free
  - G: Lead-free (for details, please contact our sales office)
- Product name (abbreviation) and packing specifications*1
  - I6T1: SNT-6A, Tape
- Option*2
- Output form and output type*3
  - A: CMOS output — Separate type
  - B: Nch open drain output — Separate type
  - C: CMOS output — Integrate type
  - D: Nch open drain output — Integrate type

(2) SOT-23-6

S – 5842A x xxx – xxxx x

- Environmental code
  - U: Lead-free (Sn 100%), halogen-free
  - S: Lead-free , halogen-free
- Product name (abbreviation) and packing specifications*1
  - M6T1: SOT-23-6, Tape
- Option*2
- Output form and output type*3
  - A: CMOS output — Separate type
  - B: Nch open drain output — Separate type
  - C: CMOS output — Integrate type
  - D: Nch open drain output — Integrate type

***1.** Refer to tape specifications.
***2.** Refer to "■ **Selection of Product Option**".
Settings are available in alphabetical order as AAA to ZZZ.
***3.** Refer to "■ **Selection of Product Option**".

2. Package

Package Name	Drawing Code			
	Package	Tape	Reel	Land
SNT-6A	PG006-A-P-SD	PG006-A-C-SD	PG006-A-R-SD	PG006-A-L-SD
SOT-23-6	MP006-A-P-SD	MP006-A-C-SD	MP006-A-R-SD	—

3. Product Name List

(1) SNT-6A

Table 1

Product name	Output form and type	Option for detection temperature's spec							
		DETH pin (for higher temperature)				DETL pin (for lower temperature)			
		Detection temperature (T_{DH})	Accuracy of detection temperature*1	Hysteresis temperature (T_{HYSH})	Output logic	Detection temperature (T_{DL})	Accuracy of detection temperature*1	Hysteresis temperature (T_{HYSL})	Output logic
S-5842ABAAA-I6T1x	Nch open drain, Separate	+62°C	—	+2°C	"H"	−3°C	±2.5°C	−2°C	"L"
S-5842ABAAC-I6T1x	Nch open drain, Separate	+60°C	—	−2°C	"H"	0°C	±2.5°C	+2°C	"L"

***1** Either of two detection temperatures (T_{DH}, T_{DL}), an accuracy of ±2.5°C is set only for the one that user specifies a higher accuracy than the other (T_{DH}, T_{DL}).

Remark 1. Please contact our sales office for products other than those specified above. Refer to "■ **Selection of Product Option**" for details.
2. x: G or U
3. Please select products of environmental code = U for Sn 100%, halogen-free products.

(2) SOT-23-6

Table 2

Product name	Output form and type	Option for detection temperature's spec							
		DETH pin (for higher temperature)				DETL pin (for lower temperature)			
		Detection temperature (T_{DH})	Accuracy of detection temperature*1	Hysteresis temperature (T_{HYSH})	Output logic	Detection temperature (T_{DL})	Accuracy of detection temperature*1	Hysteresis temperature (T_{HYSL})	Output logic
S-5842AAAAF-M6T1y	CMOS, Separate	+95°C	—	−5°C	"L"	+55°C	±2.5°C	−5°C	"L"

***1** Either of two detection temperatures (T_{DH}, T_{DL}), an accuracy of ±2.5°C is set only for the one that user specifies a higher accuracy than the other (T_{DH}, T_{DL}).

Remark 1. Please contact our sales office for products other than those specified above. Refer to "■ **Selection of Product Option**" for details.
2. y: S or U
3. Please select products of environmental code = U for Sn 100%, halogen-free products.

■ Pin Configuration

SNT-6A
Top view

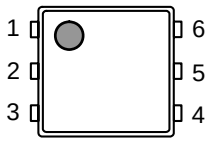


Figure 5

Table 3

Pin No.	Symbol	Description
1	DETH	Output pin for higher temperature detection
2	VSS	GND
3	RTH*1	TEST
4	RTL*2	TEST
5	DETL	Output pin for lower temperature detection
6	VDD	Power supply

***1.** Set the RTH pin open in use.
***2.** Set the RTL pin open in use.

Remark See Dimensions for details of the package drawings.

SOT-23-6
Top view

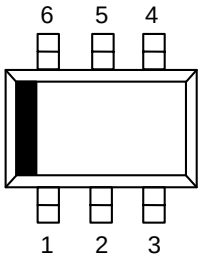


Figure 6

Table 4

Pin No.	Symbol	Description
1	VDD	Power supply
2	DETL	Output pin for lower temperature detection
3	RTL*1	TEST
4	RTH*2	TEST
5	VSS	GND
6	DETH	Output pin for higher temperature detection

***1.** Set the RTL pin open in use.
***2.** Set the RTH pin open in use.

Remark See Dimensions for details of the package drawings.

■ Absolute Maximum Ratings

Table 5

(Ta = +25°C unless otherwise specified)

Item		Symbol	Absolute Maximum Ratings	Unit
Power supply voltage (V_{SS} = 0 V)		V_{DD}	V_{SS}+6.5	V
Pin voltage		V_{RTH}, V_{RTL}	V_{SS}−0.3 to V_{DD}+0.3	V
Output voltage	CMOS output	V_{DETH}, V_{DETL}	V_{SS}−0.3 to V_{DD}+0.3	V
	Nch open drain output		V_{SS}−0.3 to V_{SS}+6.5	V
Output pin current		I_{OHH}, I_{OHL}	13	mA
		I_{OLH}, I_{OLL}	13	mA
Power dissipation	SNT-6A	P_D	400[*1]	mW
	SOT-23-6		650[*1]	mW
Operation ambient temperature		T_{opr}	−40 to +125	°C
Storage temperature		T_{stg}	−65 to +150	°C

***1.** When mounted on board

[Mounted board]

(1) Board size : 114.3 mm × 76.2 mm × t1.6 mm

(2) Board name : JEDEC STANDARD51-7

Caution The absolute maximum ratings are rated values exceeding which the product could suffer physical damage. These values must therefore not be exceeded under any conditions.

■ DC Electrical Characteristics

1. S-5842A with CMOS output

Table 6

(Ta = +25°C, unless otherwise specified)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	Test Circuit
Power supply voltage	V_{DD}	Detection temperature = +20°C to +110°C	2.5	—	5.5	V	1
		Detection temperature = 0°C to +110°C	2.7	—	5.5	V	1
		Detection temperature = −10°C to +110°C	2.8	—	5.5	V	1
Detection temperature *1	T_{DH} or T_{DL}	—	T_{DET} −2.5	T_{DET}	T_{DET} +2.5	°C	1
Difference of detection temperature *2	ΔT_D	V_{DD} = 3.5 V	—	ΔT_{DET}	—	°C	1
Hysteresis temperature of DETH pin *3	T_{HYSH}	V_{DD} = 3.5 V	—	T_{HYH}	—	°C	1
Hysteresis temperature of DETL pin *3	T_{HYSL}	V_{DD} = 3.5 V	—	T_{HYL}	—	°C	1
Output current “H” of DETH pin	I_{OHH}	V_{DD} = 3.5 V, V_{DETH} = 3.0 V	0.5	3.2	—	mA	2
Output current “H” of DETL pin	I_{OHL}	V_{DD} = 3.5 V, V_{DETL} = 3.0 V	0.5	3.2	—	mA	2
Output current “L” of DETH pin	I_{OLH}	V_{DD} = 3.5 V, V_{DETH} = 0.5 V	0.5	3.0	—	mA	2
Output current “L” of DETL pin	I_{OLL}	V_{DD} = 3.5 V, V_{DETL} = 0.5 V	0.5	3.0	—	mA	2
Current consumption during operation	I_{DD}	V_{DD} = 3.5 V	—	10	16	μA	1

***1.** T_{DET} : set value for detection temperature, T_{DH} : actual detection temperature for higher temperature, T_{DL} : actual detection temperature for lower temperature
Either of two detection temperatures (T_{DH}, T_{DL}), an accuracy of ±2.5°C is set only for the one that user specifies a higher accuracy than the other (T_{DH}, T_{DL}).

***2.** ΔT_{DET} : set value for detection temperature for higher temperature − set value for detection temperature for lower temperature
ΔT_D : actual difference of detection temperature
Set two points of detection temperature so that the difference of detection temperature (ΔT_D) is in 0°C to 65°C. Users are able to set ΔT_D in 0°C, 5°C, 10°C … 60°C, 65°C.

***3.** T_{HYH}, T_{HYL} : set value for hysteresis temperature, T_{HYSH}, T_{HYSL} : actual hysteresis temperature
Users are able to select the hysteresis temperature (T_{HYSH}, T_{HYSL}) in −5°C, −2°C, +2°C, or +5°C.

[Fahrenheit ⇔ Celsius Conversion equation]

°C = (°F − 32) × 5 / 9
°F = 32 + °C × 9 / 5

2. S-5842A with Nch open drain output

Table 7

(Ta = +25°C, unless otherwise specified)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	Test Circuit
Power supply voltage	V_{DD}	Detection temperature = +20°C to +110°C	2.5	—	5.5	V	1
		Detection temperature = 0°C to +110°C	2.7	—	5.5	V	1
		Detection temperature = −10°C to +110°C	2.8	—	5.5	V	1
Detection temperature *1	T_{DH} or T_{DL}	—	T_{DET} −2.5	T_{DET}	T_{DET} +2.5	°C	1
Difference of detection temperature *2	ΔT_D	V_{DD} = 3.5 V	—	ΔT_{DET}	—	°C	1
Hysteresis temperature of DETH pin *3	T_{HYSH}	V_{DD} = 3.5 V	—	T_{HYH}	—	°C	1
Hysteresis temperature of DETL pin *3	T_{HYSL}	V_{DD} = 3.5 V	—	T_{HYL}	—	°C	1
Leakage current of DETH pin	I_{LEAKH}	V_{DD} = 3.5 V, V_{DETH} = 5.5 V	—	—	100	nA	2
Leakage current of DETL pin	I_{LEAKL}	V_{DD} = 3.5 V, V_{DETL} = 5.5 V	—	—	100	nA	2
Output current "L" of DETH pin	I_{OLH}	V_{DD} = 3.5 V, V_{DETH} = 0.5 V	0.5	3.0	—	mA	2
Output current "L" of DETL pin	I_{OLL}	V_{DD} = 3.5 V, V_{DETL} = 0.5 V	0.5	3.0	—	mA	2
Current consumption during operation	I_{DD}	V_{DD} = 3.5 V	—	10	16	μA	1

***1.** T_{DET} : set value for detection temperature, T_{DH} : actual detection temperature for higher temperature, T_{DL} : actual detection temperature for lower temperature
Either of two detection temperatures (T_{DH}, T_{DL}), an accuracy of ±2.5°C is set only for the one that user specifies a higher accuracy than the other (T_{DH}, T_{DL}).

***2.** ΔT_{DET} : set value for detection temperature for higher temperature − set value for detection temperature for lower temperature
ΔT_D : actual difference of detection temperature
Set two points of detection temperature so that the difference of detection temperature (ΔT_D) is in 0°C to 65°C. Users are able to set ΔT_D in 0°C, 5°C, 10°C … 60°C, 65°C.

***3.** T_{HYH}, T_{HYL} : set value for hysteresis temperature, T_{HYSH}, T_{HYSL} : actual hysteresis temperature
Users are able to select the hysteresis temperature (T_{HYSH}, T_{HYSL}) in −5°C, −2°C, +2°C, or +5°C.

[Fahrenheit ⇔ Celsius Conversion equation]

°C = (°F − 32) × 5 / 9
°F = 32 + °C × 9 / 5

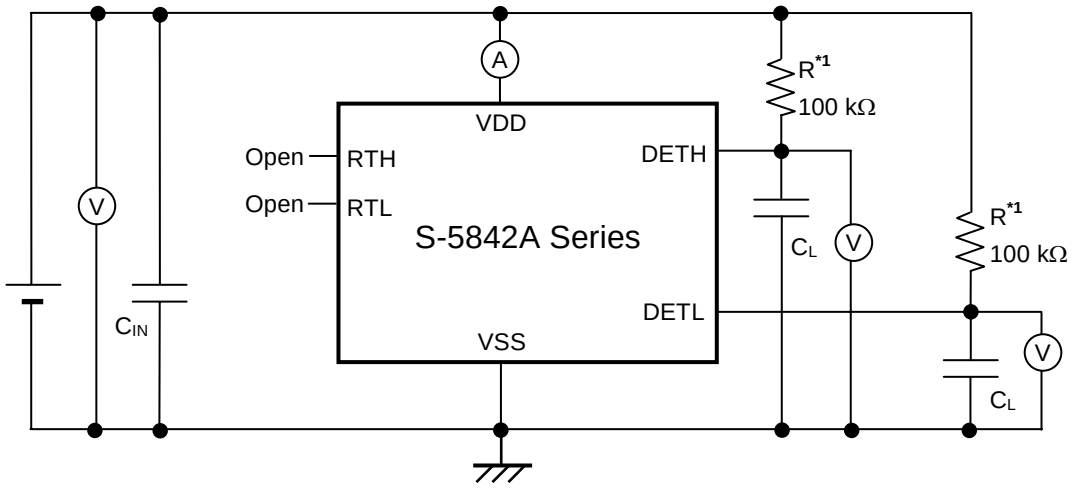
■ AC Electrical Characteristics

Table 8

Item	Symbol	Condition	Min.	Typ.	Max.	Unit	Test Circuit
Noise suppression time	t_{delay}	V_{DD} = 3.5 V, Ta = detection temperature	—	550	—	μs	—

■ Test Circuit

1.



***1.** Resistor (R) is unnecessary for the CMOS output product.

Figure 7

2.

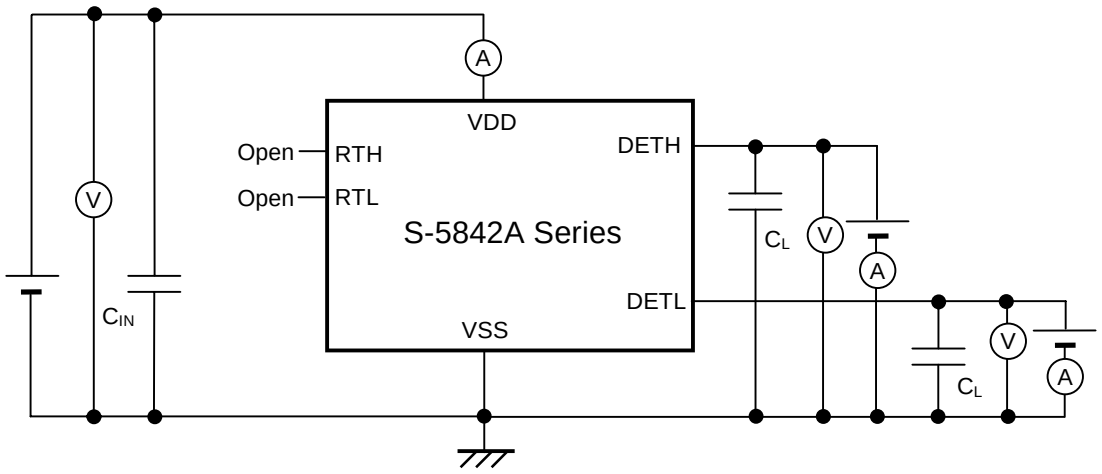


Figure 8

■ Selection of Product Option

1. Selection of product option

The S-5842A Series is a temperature switch IC which detects two points of temperature, and outputs a signal to the exterior.
Users are able to select the combination of output type, form and logic, two detection temperatures (T_{DH}, T_{DL}), and hysteresis temperature (T_{HYSH}, T_{HYSL}).

Output form : Set the output logic for each DETH, DETL pin.
- CMOS output
- Nch open drain output

Output type : for DETH, DETL pins, users are able to select two types of output as follows.
- Separate type : the DETH pin's output inverts during detection of higher temperature
  the DETL pin's output inverts during detection of lower temperature
- Integrate type : the DETH pin's output inverts during detection of higher temperature
  the DETL pin's output inverts during detection of higher and lower temperature

Detection temperature (T_{DH}, T_{DL}) :

T_{DH} is the detection temperature for higher temperature, T_{DL} is the detection temperature for lower temperature. Of two points of detection temperatures (T_{DH}, T_{DL}), select the detection temperature that is to be set the higher accuracy (±2.5°C accuracy). *1

The detection temperature for higher temperature is selectable in +20°C to +110°C, in 1°C step.
The detection temperature for lower temperature is selectable in −10°C to +110°C, in 1°C step.
Set two points of detection temperature so that the difference of detection temperature (ΔT_D) is in 0°C to 65°C. Users are able to set ΔT_D in 0°C, 5°C, 10°C … 60°C, 65°C.
The minimum operation voltage varies according to the detection temperature for lower temperature.
- Detection temperature = +20°C to +110°C : V_{DD} (min.) = 2.5 V
- Detection temperature = 0°C to +110°C : V_{DD} (min.) = 2.7 V
- Detection temperature = −10°C to +110°C : V_{DD} (min.) = 2.8 V

***1** Either of two detection temperatures (T_{DH}, T_{DL}), an accuracy of ±2.5°C is set only for the one that user specifies a higher accuracy than the other (T_{DH}, T_{DL}).

Hysteresis temperature (T_{HYSH}, T_{HYSL}) :

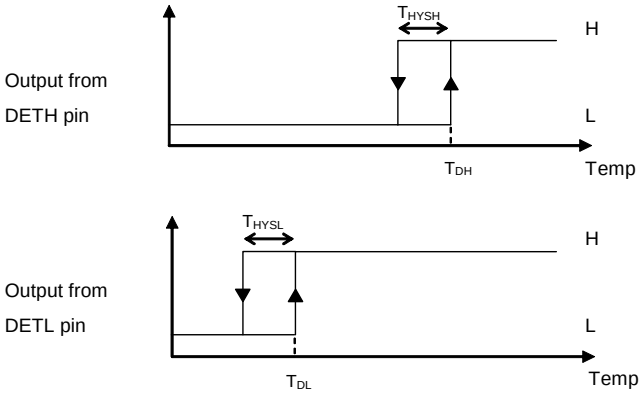
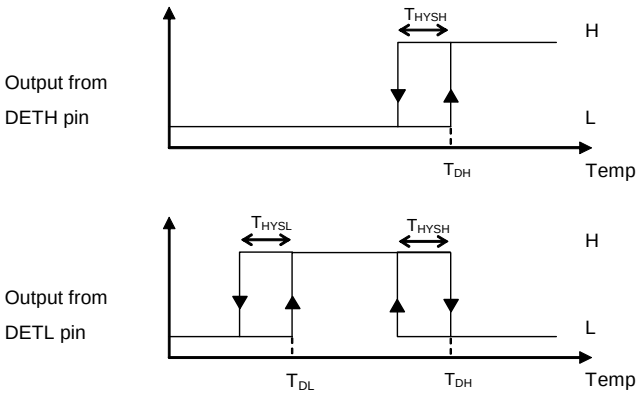
T_{HYSH} is the hysteresis temperature for detection temperature for higher temperature, T_{HYSL} is the hysteresis temperature for detection temperature for lower temperature. These are selectable in −5°C, −2°C, +2°C, or +5°C.
- −5°C : Output recovers when temperature has dropped to 5°C from the detection temperature.
- −2°C : Output recovers when temperature has dropped to 2°C from the detection temperature.
- +2°C : Output recovers when temperature has risen to 2°C from the detection temperature.
- +5°C : Output recovers when temperature has risen to 5°C from the detection temperature.

Output logic : Set the output logic for each DETH, DETL pin in Ta > detection temperature (T_{DH}, T_{DL}) or release temperature ($T_{DH} + T_{HYSH}$, $T_{DL} + T_{HYSL}$).

(1) Hysteresis temperature : −5°C, −2°C
- "H" : The output logic is in "H" in Ta > detection temperature
- "L" : The output logic is in "L" in Ta > detection temperature

(2) Hysteresis temperature : +2°C, +5°C
- "H" : The output logic is in "H" in Ta > release temperature
- "L" : The output logic is in "L" in Ta > release temperature

2. Example of product spec

Example of product spec	Operation
Output form : CMOS output Output type : Separate type [DETH pin] Detection voltage : T_{DH} Hysteresis temperature : T_{HYSH} (< 0) Output logic : “H” [DETL pin] Detection voltage : T_{DL} Hysteresis temperature : T_{HYSL} (< 0) Output logic : “H”	 **Figure 9 Operation, CMOS and Separate Type**
Output form : CMOS output Output type : Integrate type [DETH pin] Detection temperature : T_{DH} Hysteresis temperature : T_{HYSH} (< 0) Output logic : “H” [DETL pin] Detection temperature : T_{DL} Hysteresis temperature : T_{HYSL} (< 0) Output logic : “H”	 **Figure 10 Operation, CMOS and Integrate Type**

■ Operation

1. Separate type

The followings are the operation with its specs when the S-5842A series is Separate type. The timing chart is shown in **Figure 11**.

- Output form and type : CMOS output, Separate type
- Option : DETH pin Detection temperature T_{DH} = +95°C
  Hysteresis temperature T_{HYSH} = −5°C
  Output logic "H"
  DETL pin Detection temperature T_{DL} = +55°C
  Hysteresis temperature T_{HYSL} = −5°C
  Output logic "H"

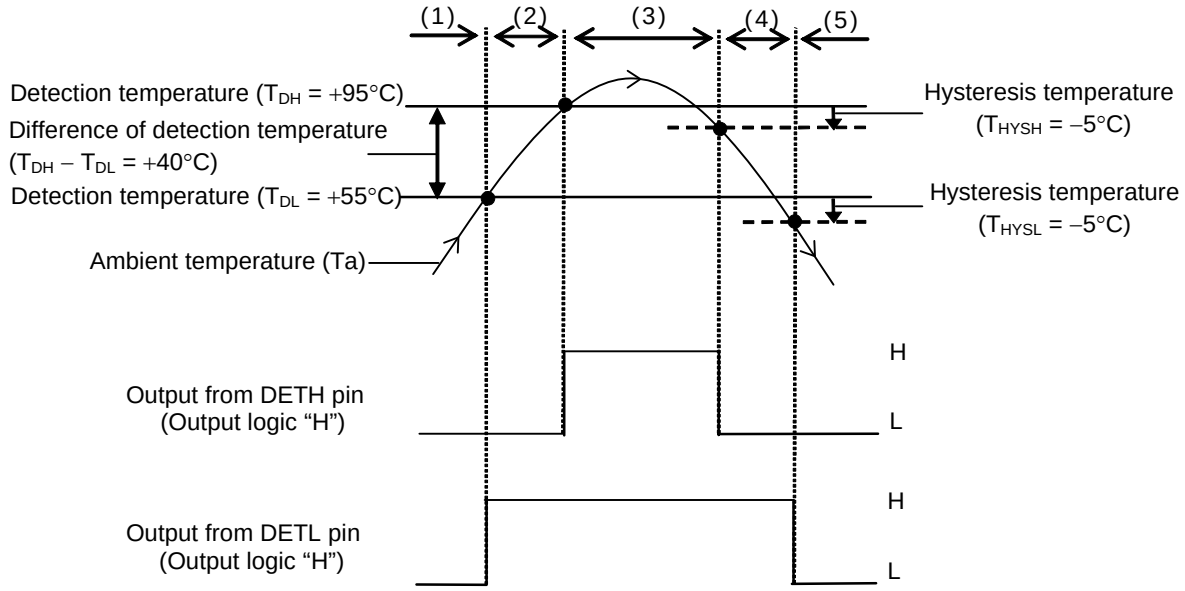


Figure 11 Timing Chart, CMOS and Separate Type

Detecting the temperature is started after power-on.

In case;

(1) Ambient temperature (Ta) < detection temperature (T_{DL} = +55°C)
The outputs from the DETH, DETL pins keep "L".

(2) The ambient temperature (Ta) rises;
detection temperature (T_{DL} = +55°C) < ambient temperature (Ta) < detection temperature (T_{DH} = +95°C)
The output from the DETH pin keeps "L", the output from the DETL pin gets "H".

(3) Furthermore, the ambient temperature (Ta) rises;
ambient temperature (Ta) > detection temperature (T_{DH} = +95°C)
The output from the DETL pin keeps "H", the output from the DETH pin gets "H".

(4) After that, the ambient temperature (Ta) falls;
release temperature (T_{DH} + T_{HYSH} = +90°C) > ambient temperature (Ta) > release temperature (T_{DL} + T_{HYSL} = +50°C)
The output from the DETH pin gets "L", the output from DETL pin keeps "H".

(5) Furthermore the ambient temperature (Ta) falls;
ambient temperature (Ta) < release temperature (T_{DL} + T_{HYSL} = +50°C)
The output from the DETH pin keeps "L", the output from the DETL pin gets "L".

2. Integrate type

The followings are the operation with its specs when the S-5842A series is Integrate type. The timing chart is shown in **Figure 12**.

- Output form and type : CMOS output, Integrate type
- Option : DETH pin Detection temperature T_{DH} = +95°C
  Hysteresis temperature T_{HYSH} = −5°C
  Output logic "H"
  DETL pin Detection temperature T_{DL} = +55°C
  Hysteresis temperature T_{HYSL} = −5°C
  Output logic "H"

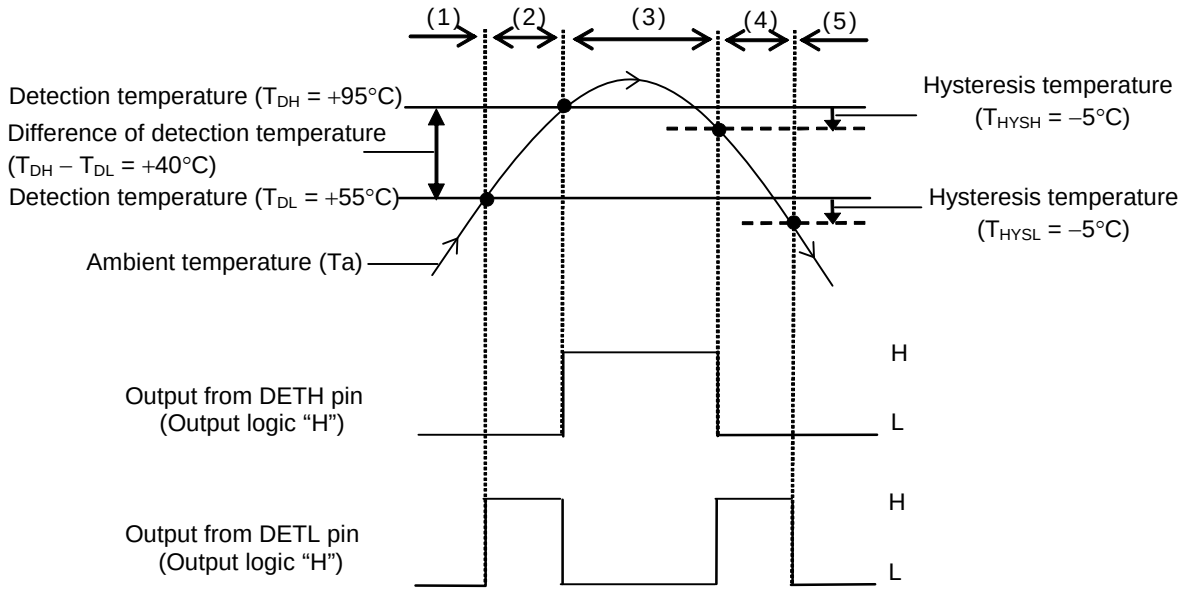


Figure 12 Timing Chart, CMOS and Integrate Type

Detecting the temperature is started after power-on.

In case;

(1) Ambient temperature (Ta) < detection temperature (T_{DL} = +55°C)
The outputs from the DETH, DETL pins keep "L".

(2) The ambient temperature (Ta) rises;
detection temperature (T_{DL} = +55°C) < ambient temperature (Ta) < detection temperature (T_{DH} = +95°C)
The output from the DETH pin keeps "L", the output from the DETL pin gets "H".

(3) Furthermore, the ambient temperature (Ta) rises;
ambient temperature (Ta) > detection temperature (T_{DH} = +95°C)
The output from the DETH pin gets "H", the output from the DETL pin gets "L".

(4) After that, the ambient temperature (Ta) falls;
release temperature (T_{DH} + T_{HYSH} = +90°C) > ambient temperature (Ta) > release temperature (T_{DL} + T_{HYSL} = +50°C)
The output from the DETH pin gets "L", the output from DETL pin gets "H".

(5) Furthermore the ambient temperature (Ta) falls;
ambient temperature (Ta) < release temperature (T_{DL} + T_{HYSL} = +50°C)
The output from the DETH pin keeps "L", the output from the DETL pin gets "L".

3. Noise suppression time

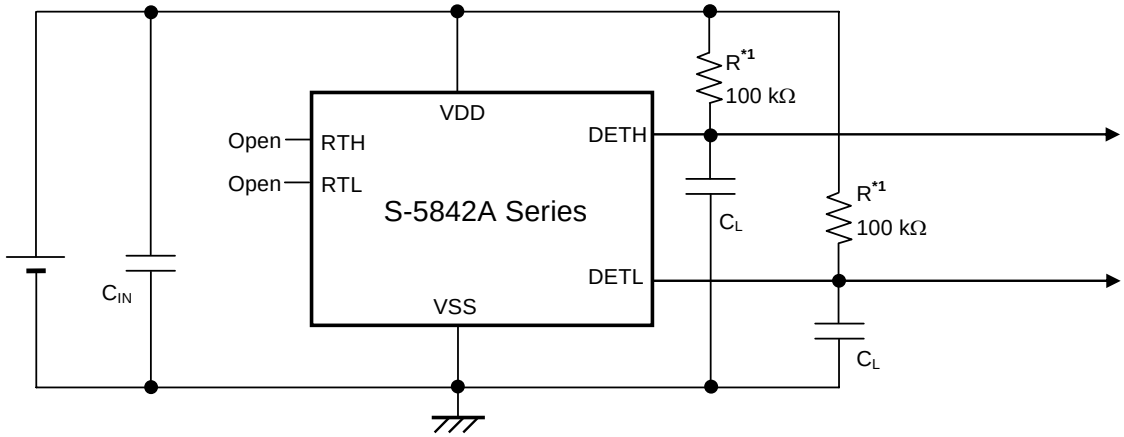
The S-5842A Series has a delay circuit to suppress noise.
The followings are the operation of output from DETH when the output logic is “H”.

- The temperature is the detection temperature or less
  The output from a comparator is “H”, and the output from DETH pin is “L”. Due to noise or others, the output from a comparator is inverted to “L” once; however, the output from the DETH pin keeps “L” if this status is noise suppression time or shorter.

- The temperature exceeds the detection temperature
  The output from a comparator gets “L”. And the output from the DETH pin gets “H” after the period has passed noise suppression time (t_{delay}) or longer.

Noise suppression time is available for the DETL pin as well.

■ Application Circuit



***1.** Resistor (R) is unnecessary for CMOS output product.

Figure 13 Application Circuit

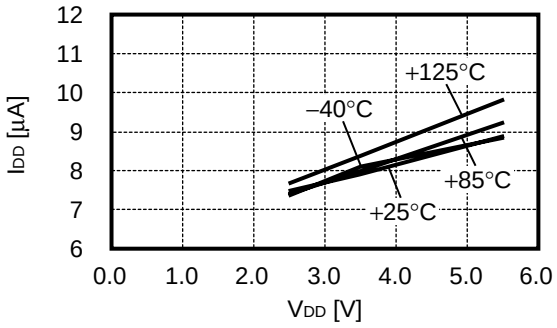
Caution The above connection diagram will not guarantee successful operation. Perform thorough evaluation using actual application to set the constant.

■ Precautions

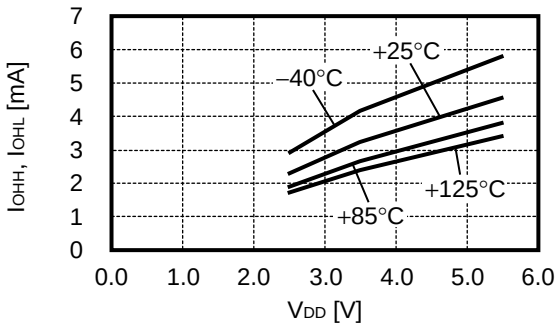
- Either of two detection temperatures (T_{DH}, T_{DL}), an accuracy of ±2.5°C is set only for the one that user specifies a higher accuracy than the other (T_{DH}, T_{DL}).
- Set a capacitor (C_{IN}) of approx. 0.1 μF between VDD and VSS for stabilization.
- To prevent error due to noise during power-on, set a capacitor (C_L) of approx. 0.1 μF for the DETH and DETL pin.
- The S-5842A Series may oscillate by connecting a capacitor to the RTH/RTL pin. Set the RTH and RTL pin open in use.
- The DETH and DETL pins output a signal that of (Ta > detection temperature) by short-circuit the RTH/RTL pin to VSS.
- Do not apply an electrostatic discharge to this IC that exceeds the performance ratings of the built-in electrostatic protection circuit.
- SII claims no responsibility for any disputes arising out of or in connection with any infringement by products, including this IC, of patents owned by a third party.

■ Characteristics (Typical Data)

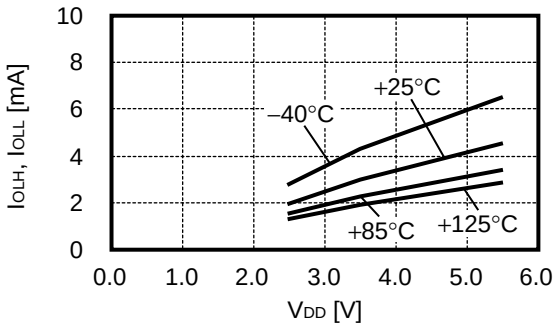
1. Current consumption during operation (I_{DD}) vs. Power supply voltage (V_{DD}) characteristics



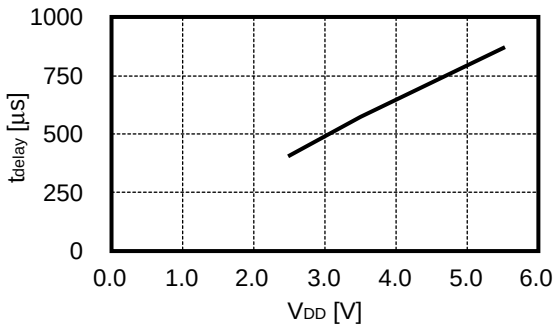
2. Output current "H" of DETH/DETL pin (I_{OHH}/I_{OHL}) vs. Power supply voltage (V_{DD}) characteristics (CMOS output product only)



3. Output current "L" of DETH/DETL pin (I_{OLH}/I_{OLL}) vs. Power supply voltage (V_{DD}) characteristics



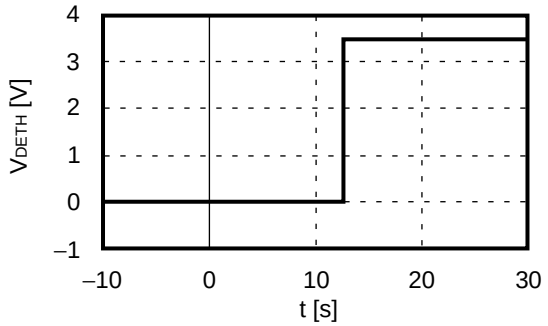
4. Noise suppression time (t_{delay}) vs. Power supply voltage (V_{DD}) characteristics



5. Response against heat Output voltage (V_{DETH}) vs. Time (t)

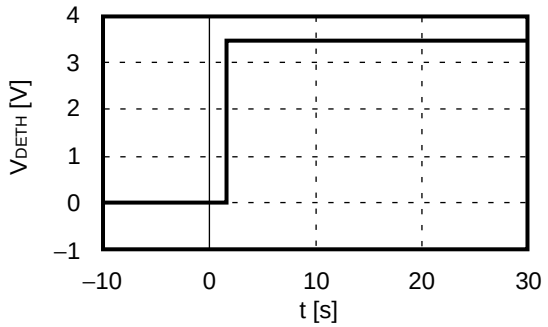
(1) When SNT-6A is put into the air of +100 degrees from the air of +25 degrees at t = 0 [s]

V_{DD} = 3.5 V, C_L = 0 μF, Detection temperature = +62°C, Output logic "H"



(2) When SNT-6A is put into the liquid of +100 degrees from the air of +25 degrees at t = 0 [s]

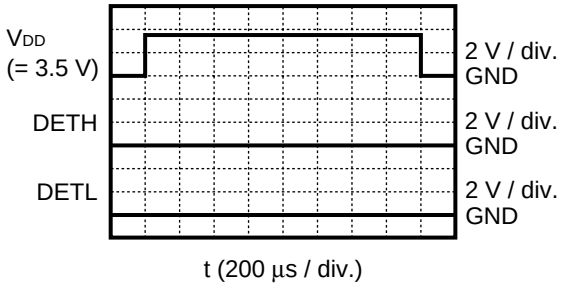
V_{DD} = 3.5 V, C_L = 0 μF, Detection temperature = +62°C, Output logic "H"



6. Response against startup

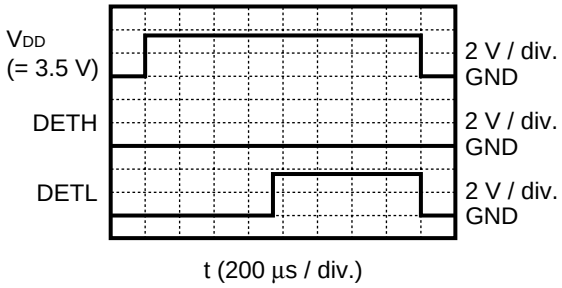
(1) Power-on at Ta = +25°C

T_{DH} = +110°C, T_{DL} = +45°C, Output logic "H", C_L = 0 μF



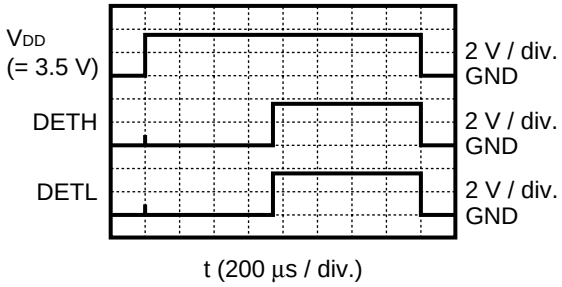
(2) Power-on at Ta = +80°C

T_{DH} = +110°C, T_{DL} = +45°C, Output logic "H", C_L = 0 μF



(3) Power-on at Ta = +120°C

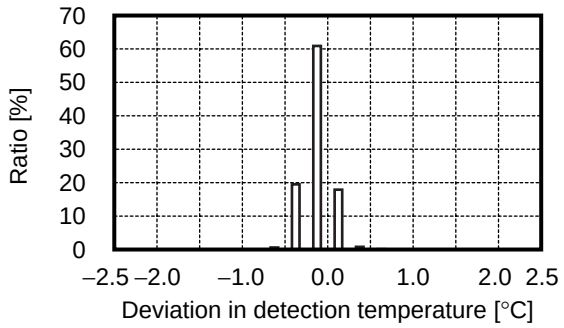
T_{DH} = +110°C, T_{DL} = +45°C, Output logic "H", C_L = 0 μF



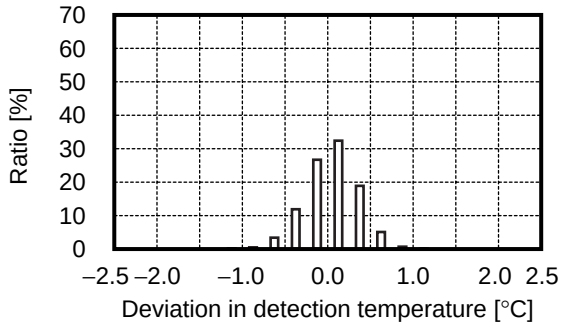
7. Accuracy of detection temperature

High accuracy detection voltage : T_{DH},
T_{DH} = +110°C, T_{DL} = +45°C
Measured data on one wafer picked up

(1) Accuracy of detection temperature at T_{DH} = +110°C (higher accuracy)



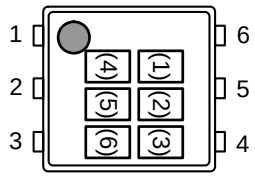
(2) Accuracy of detection temperature at T_{DL} = +45°C



■ Marking Specification

1. SNT-6A

SNT-6A
Top view



(1) to (3) : Product code (refer to **Product name vs. Product code**)
(4) to (6) : Lot number

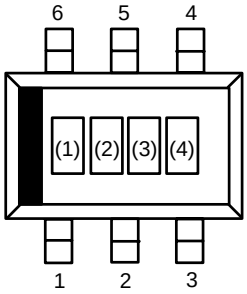
Product name vs. Product code

Product name	Product code		
	(1)	(2)	(3)
S-5842ABAAA-I6T1x	U	H	A
S-5842ABAAC-I6T1x	U	H	C

Remark 1. Please contact our sales office for the products other than those specified above.
2. x: G or U
3. Please select products of environmental code = U for Sn 100%, halogen-free products.

2. SOT-23-6

SOT-23-6
Top view

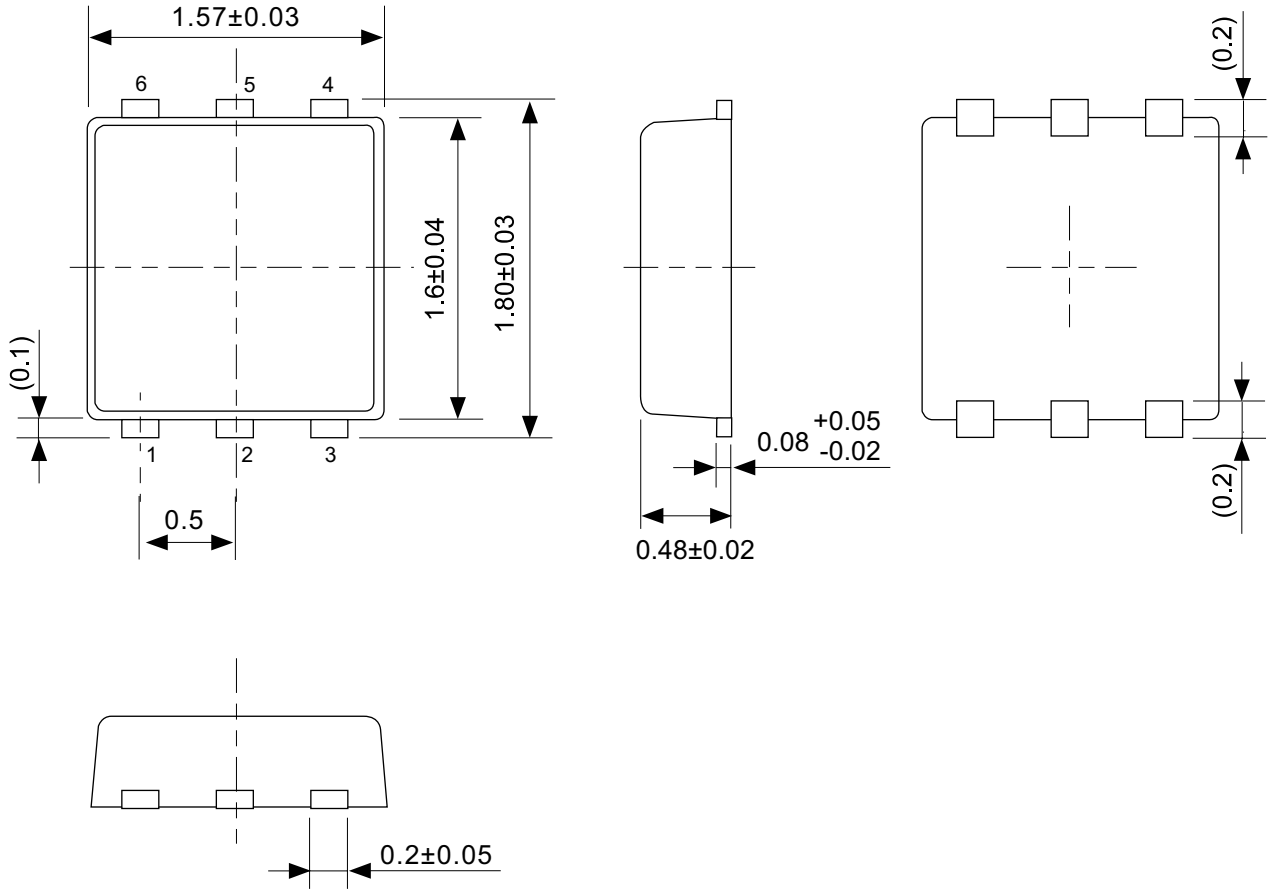


(1) to (3) : Product code (refer to **Product name vs. Product code**)
(4) : Lot number

Product name vs. Product code

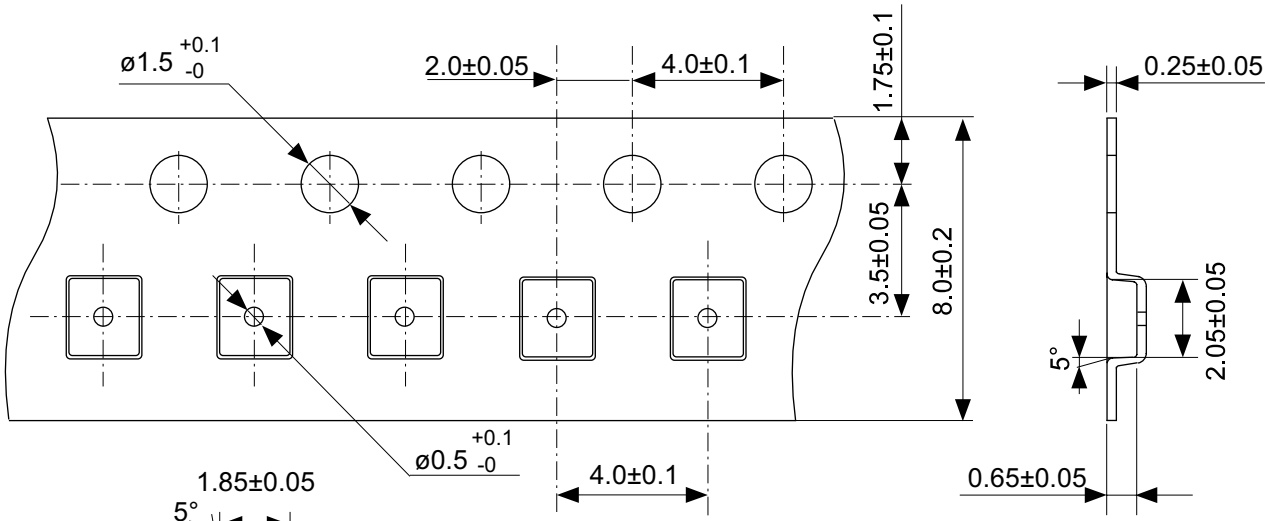
Product name	Product code		
	(1)	(2)	(3)
S-5842AAAAF-M6T1y	U	I	F

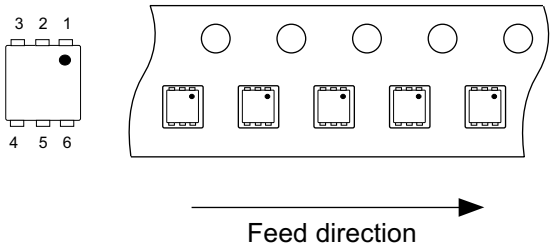
Remark 1. Please contact our sales office for the products other than those specified above.
2. y: S or U
3. Please select products of environmental code = U for Sn 100%, halogen-free products.



No. PG006-A-P-SD-2.0

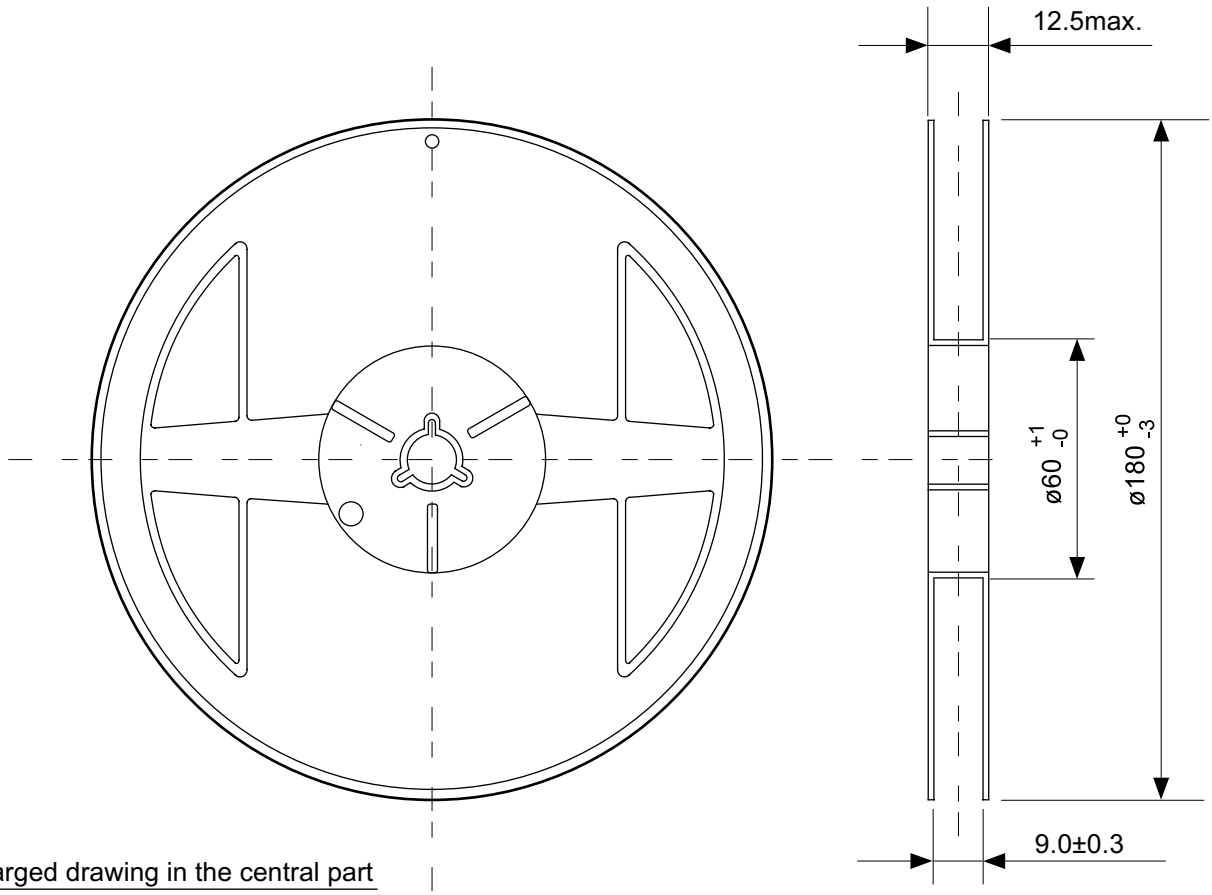
TITLE	SNT-6A-A-PKG Dimensions
No.	PG006-A-P-SD-2.0
SCALE	
UNIT	mm
Seiko Instruments Inc.	



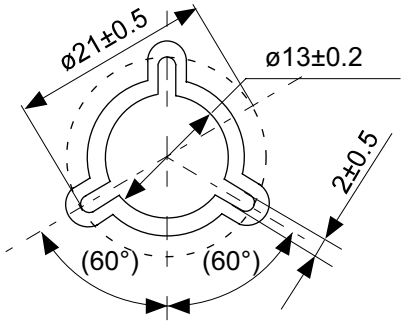


No. PG006-A-C-SD-1.0

TITLE	SNT-6A-A-Carrier Tape
No.	PG006-A-C-SD-1.0
SCALE	
UNIT	mm
Seiko Instruments Inc.	

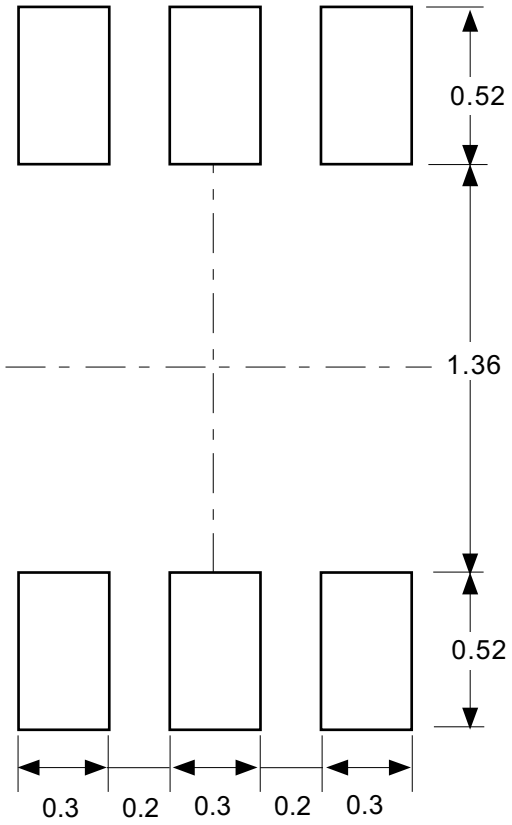


Enlarged drawing in the central part



No. PG006-A-R-SD-1.0

TITLE	SNT-6A-A-Reel		
No.	PG006-A-R-SD-1.0		
SCALE		QTY.	5,000
UNIT	mm		
Seiko Instruments Inc.			

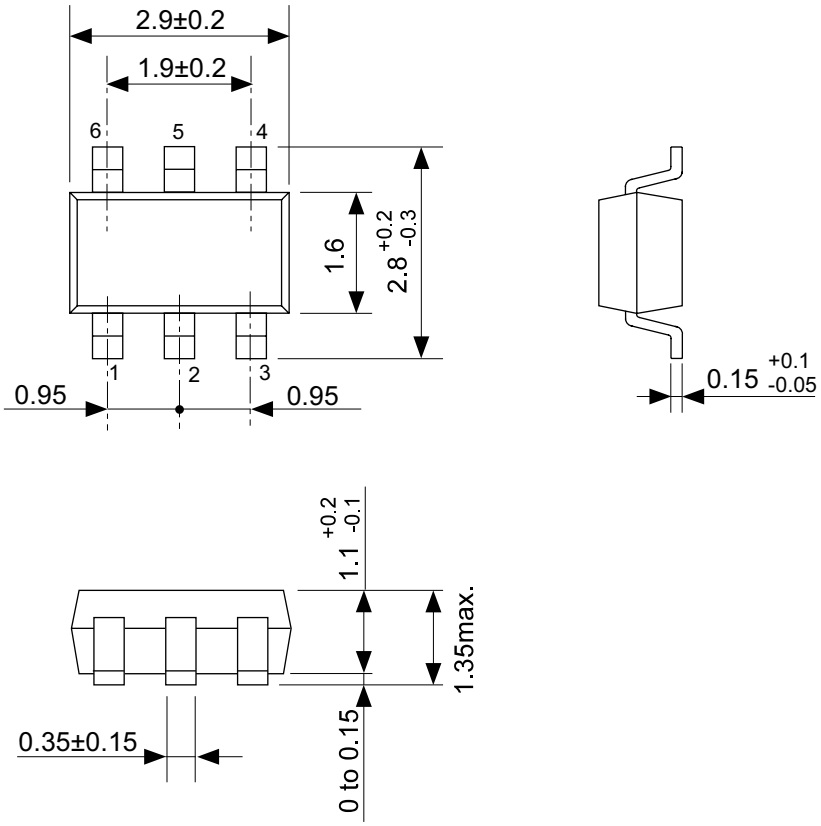


Caution Making the wire pattern under the package is possible. However, note that the package may be upraised due to the thickness made by the silk screen printing and of a solder resist on the pattern because this package does not have the standoff.

注意 パッケージ下への配線パターン形成は可能ですが、本パッケージはスタンドオフが無いので、パターン上のレジスト厚み、シルク印刷の厚みによってパッケージが持ち上がることがありますのでご配慮ください。

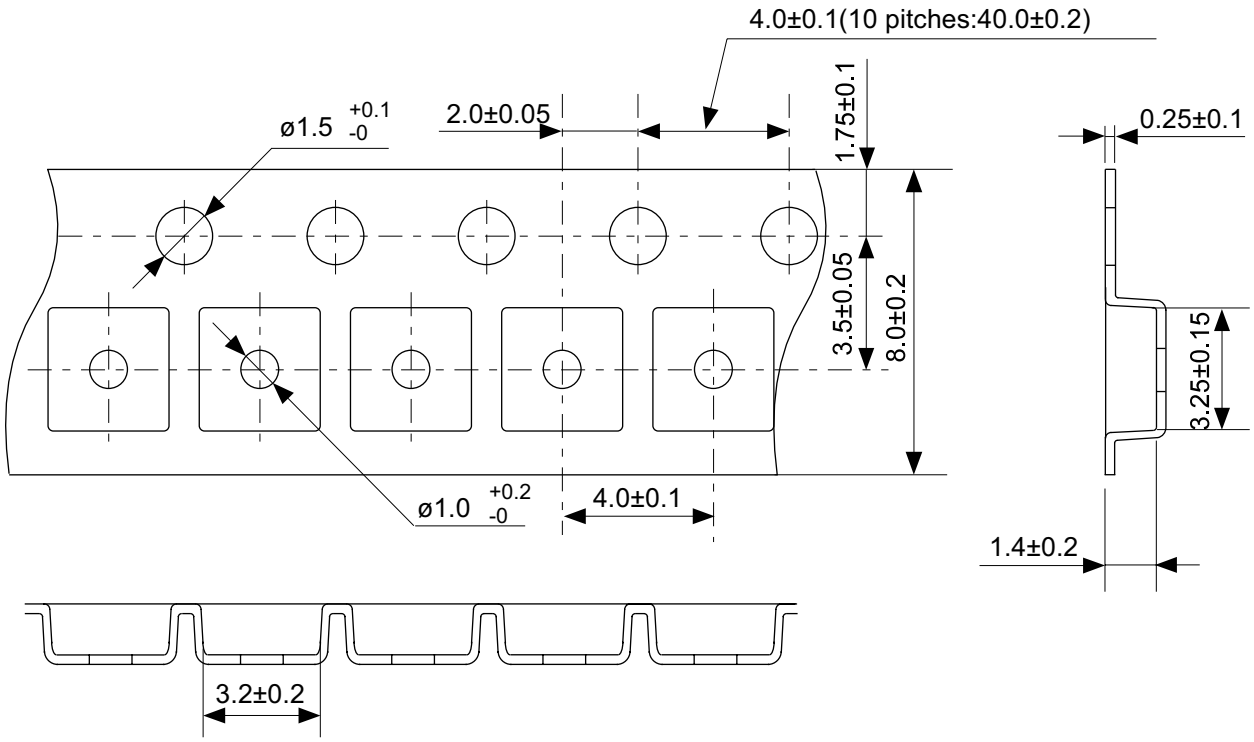
No. PG006-A-L-SD-3.0

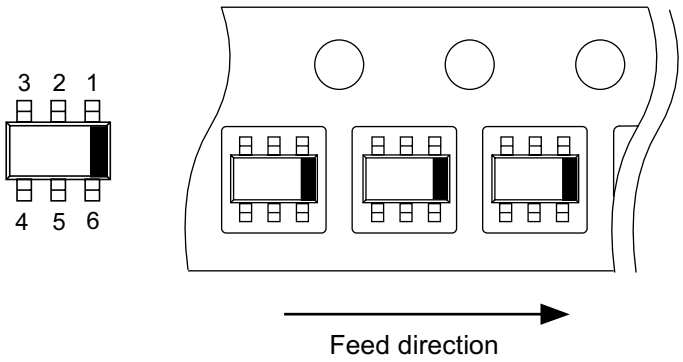
TITLE	SNT-6A-A-Land Recommendation
No.	PG006-A-L-SD-3.0
SCALE	
UNIT	mm
Seiko Instruments Inc.	



No. MP006-A-P-SD-1.1

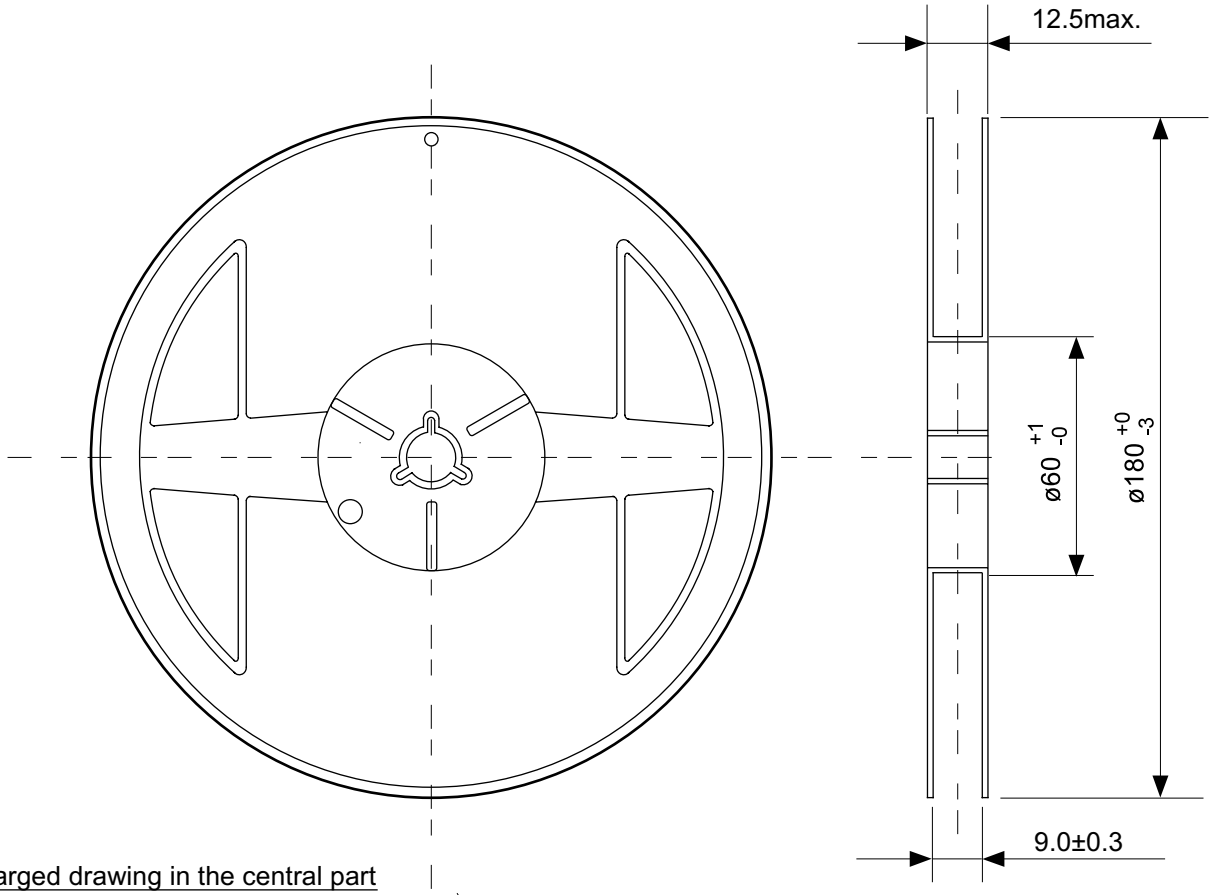
TITLE	SOT236-A-PKG Dimensions
No.	MP006-A-P-SD-1.1
SCALE	
UNIT	mm
Seiko Instruments Inc.	



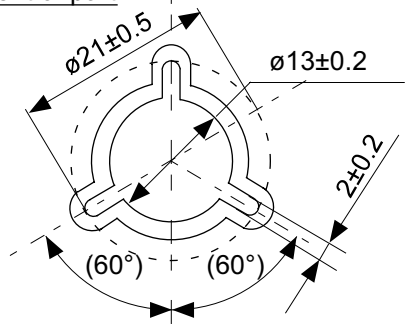


No. MP006-A-C-SD-3.1

TITLE	SOT236-A-Carrier Tape
No.	MP006-A-C-SD-3.1
SCALE	
UNIT	mm
Seiko Instruments Inc.	



Enlarged drawing in the central part



No. MP006-A-R-SD-2.1

TITLE	SOT236-A-Reel		
No.	MP006-A-R-SD-2.1		
SCALE		QTY	3,000
UNIT	mm		
Seiko Instruments Inc.			

Seiko Instruments Inc.
www.sii-ic.com

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