納入仕様書

SPECIFICATION

仕様書番号
SPEC. No.
発 行 日
DATE:

MESSRS.

御中

貴社品名 CUSTOMER'S PRODUCT NAME	弊社品名 TDK PRODUCT NAME TEMPERATURE HUMIDITY SENSOR CHS-CSC-20

受領印欄 THIS SPECIFICATION IS RECEIVED

受領日 年 月 日
DATE: YEAR MONTH DAY

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責任者 APPROVED BY	確認者 CHECKED BY	担当者 ISSUED BY

検索用製品分類コード PRODUCT CLASSIFICATION CODE

Product Information, Precautions and Warnings - IMPORTANT

Before use, please read the following carefully as the product use in improper conditions may shorten product life. Please confirm the functional life in your usage conditions ahead of actualinstallations. Although TDK makes its utmost effort to constantly improve reliability of its product quality, your misuse may cause the product malfunctioning and property damage and/or human injury. For this reason, TDK requests that customers use the products with sufficient handling care and add a safeguard design upon your application so as to prevent malfunctioning of your systems, serious damages, personal accidents, fires and other possible damages, which may result from using these products of ours.

Precaution:
The product's operating life is limited because the products are constantly exposed to various environments when used. For this reason, this "operating life" must be taken into consideration before use.

(1)Storage
・Store the products within the "absolute maximum ratings" specified.
・Do not store the products in dusty places or in places where corrosive gases are generated.
・When storing CHS series humidity sensors for long(over 1 year) or storing in places with high temperature and high humidity or where sudden temperature change may occur, the humidity-sensitive film on the sensor elements as well as the solderability of the terminals of the sensor unit may deteriorate to cause output changes in excess of the guaranteed ranges.

(2)Operating Environment and Conditions
・Use CHS series within the "absolute maximum ratings" of the operating environmental conditions specified.
・Electrically, such as input voltages, please stay within our electrical specifications.
・Avoid usage in locations subject to corrosive gases or excessive dust as these may cause the element's deterioration, resulting in output changes in excess of guaranteed ranges. Please consider measures to keep the corrosive gases from entering the sensor unit, for example, by a special jig to seal it, particularly during a solder flow process where flux-decomposed gases generate.
・Avoid usage in locations subject to excessive dewing or to water or salt water, as it may deteriorate the element to cause output changes in excess of guaranteed ranges.

(3)Handling
・Applying excessive physical impacts to the sensor, such as by dropping, should be strictly avoided.
・Avoid applying excessive mechanical stress onto the product, for instance, when forming the terminals, for it may cause damages to the component.

変更履歴
Revision Records

版 Rev.	年月日 Date	担　当 Revised By	変　更　内　容 Revision
事業部（部） Div.		作成日 Date	仕様書番号 Spec. No.
Sensor Actuator Business Group			

基本目次 Basic contents

1.適用範囲 Scope of Application

本仕様書は　　殿へ納入する温湿度ｾﾝｻに適用する。

This specification shall be applied to the product TEMPERATURE HUMIDITY SENSOR to be delivered to Messrs.　　.

2.製品の名称 Name of Product

本仕様書に定める製品の名称は CHS-CSC-20 とする。

The name of the product to be defined in this specification shall be defined as CHS-CSC-20.

3.関連規格 Related Spec.

4.記載項目 Description

Items	Attached drawing and tables	Page
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変更履歴

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1. MAXIMUM RATINGS

Power voltage	+7V D.C. (at 25deg)
Ambient conditions	During operating : 0 to +50 deg, 5 to 95%RH, 5Vdc power voltage, without dewing During storage : -20 to +60 deg, 5 to 95%RH

2. RATINGS

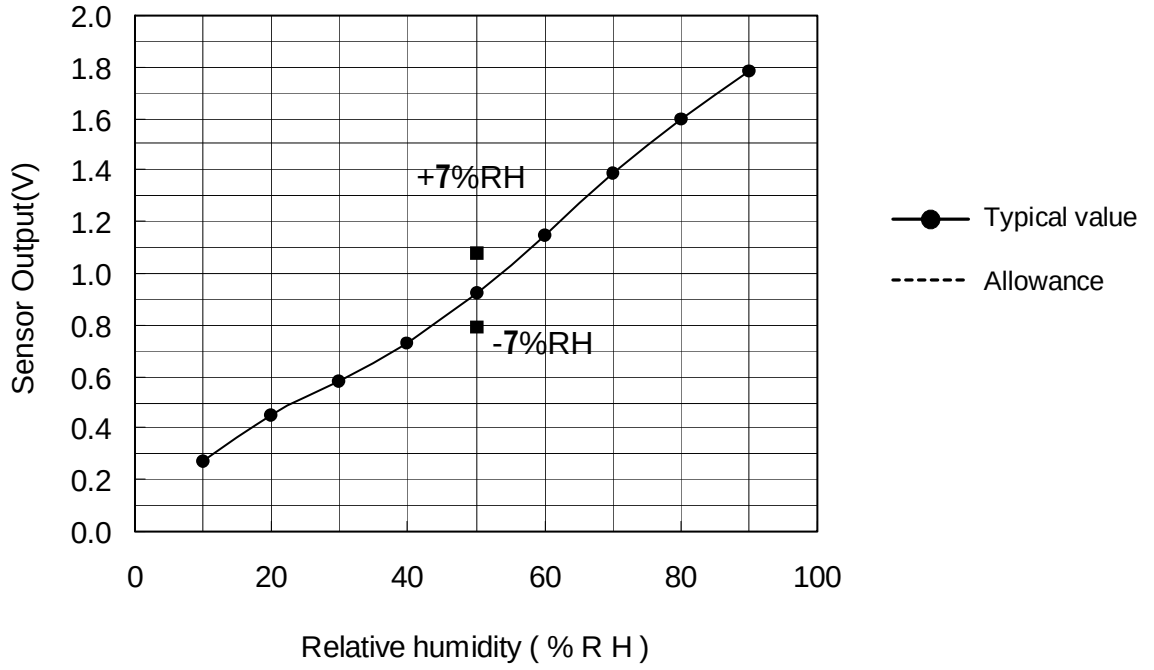
Item	Ratings			Unit	Conditions
	Min.	Typ.	Max.		
Operating voltage(Vo)	4.75	5	5.25	V	
Operating current			0.6	mA	Vo=5.0V 25 deg
Output impedance		(100)		kΩ	at DC
Humidity detection accuracy (50%RH)	0.790 (-7%RH)	0.92	1.078 (+7%RH)	V	Vo=5.0V 25 deg (See characteristics chart.)
Hysteresis		0		%RH	Allow 20 minutes for stabilization
Response time		1		min.	response 90% humidity change between 30%RH and 85%RH
Recommended operating temperature	5		45	℃	Vo=5.0V (See characteristics chart.)

3. THERMISTORS,TEMPERATURE DETECTION

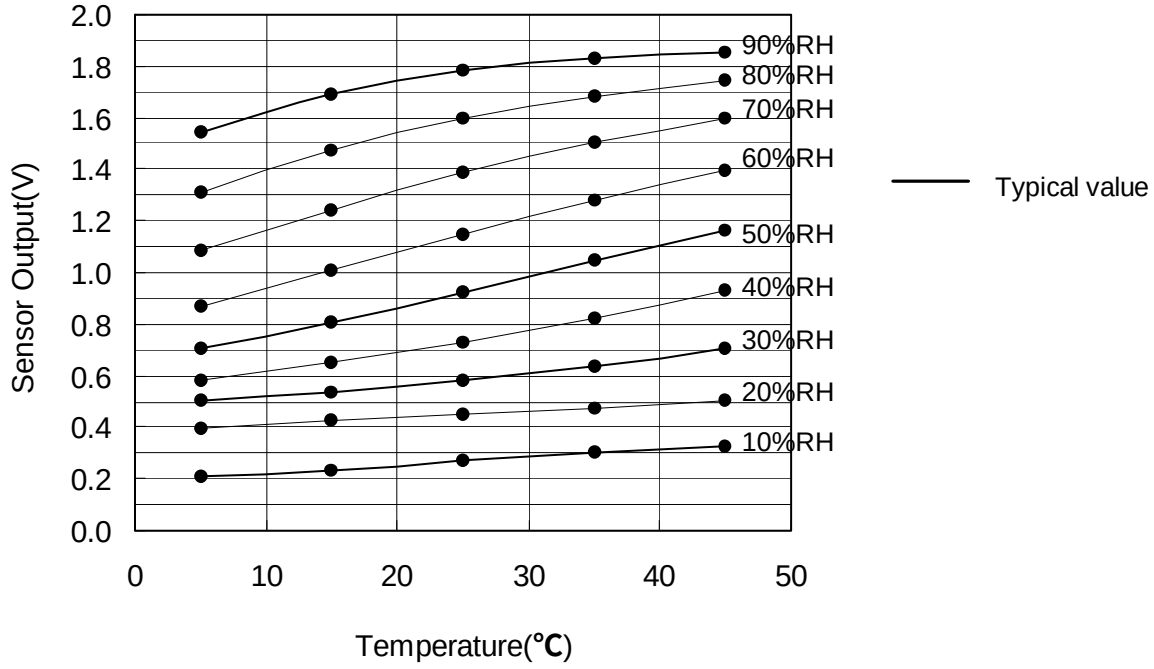
3-(1)TYPE	NTCG104BH103JT
3-(2)RESISTANCE	10kohm+/-5%
3-(3)B-CONSTANT	4100K+/-3%
3-(4)MAX, Permissible Electric Power	230mW

4. HUMIDITY SENSOR CHARACTERISTICS (Representative example)

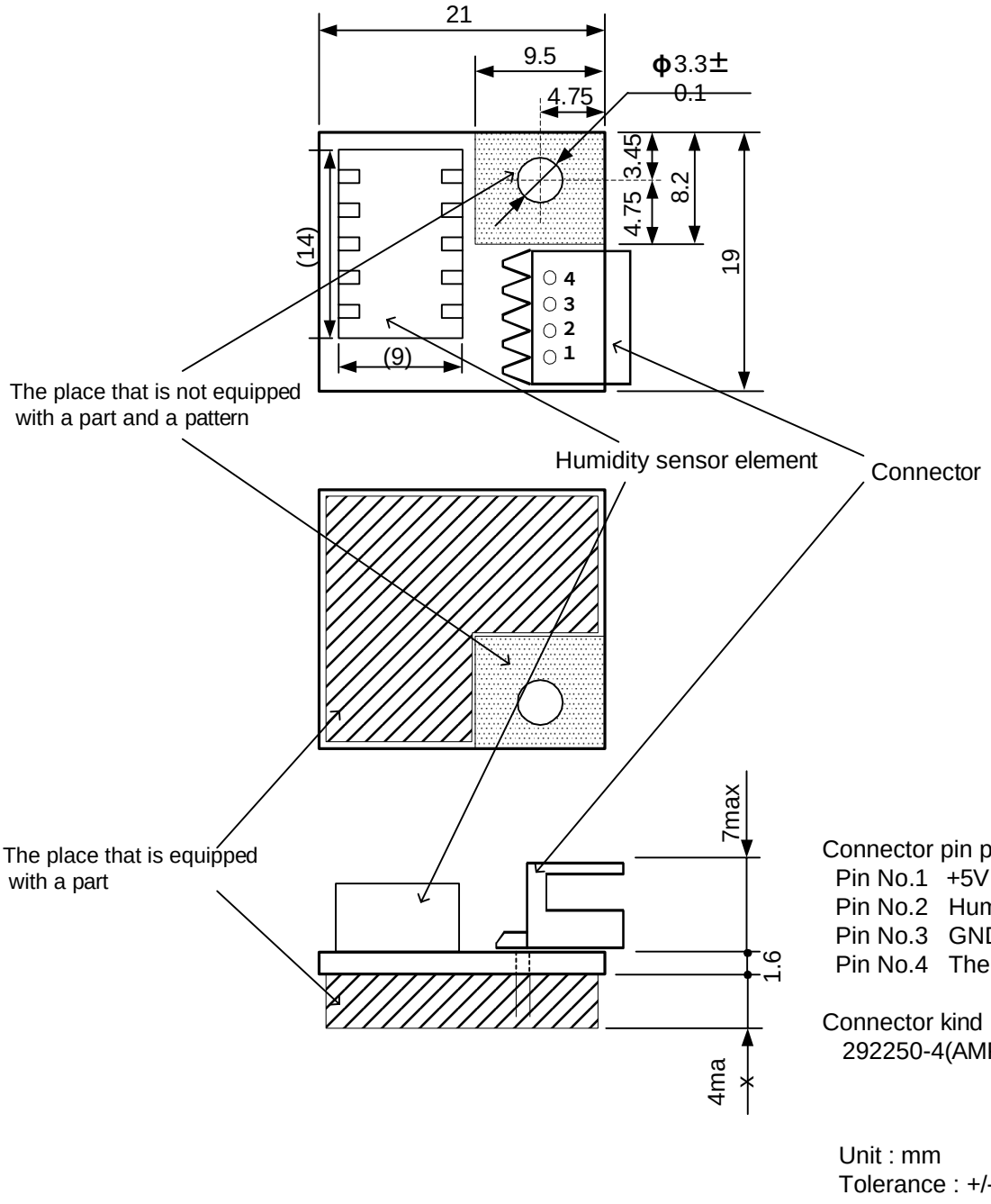
4-(1)LINEARITY CHARACTERISTICS



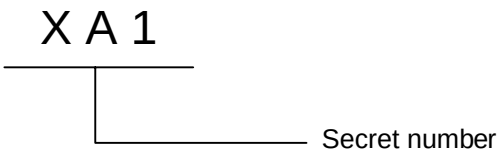
4-(2)TEMPERATURE CHARACTERISTICS



5. APPEARANCE STRUCTURE AND DIMENSIONS



6. MARKING



* Symbols, color dots, and the like may be added as necessary

TDK CORPORATION	NAME OF DRAWING	DRAWING No.	PAGE
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7. MECHANICAL PERFORMANCE CHARACTERISTICS

ITEM	TEST CONDITION	SPECIFICATIONS
VIBRATION RESISTANCE	at frequencies of 5 to 55Hz, at amplitude of 2.0mm into the X, Y and Z directions, each for two hours.	Deviation from initial value +/-5%RH or less
SHOCK RESISTANCE	at 100G,for 6msec, three times in each of the X, Y and Z directions.	Appearance There is no modification.
NATURAL FALL	from a height of 30cm onto concrete floor.	
HIGH-TEMPERATURE STORAGE TEST	+60 deg 240h	Deviation from initial value +/-5%RH or less
LOW-TEMPERATURE STORAGE TEST	-40 deg 240h	
THERMAL SHOCK TEST	-40 to +60 deg each lasting 30 min. 10cyc	