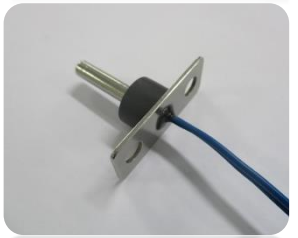
THERMISTOR

ADVANCE THERMO TECHNOLOGY CO., LTD.



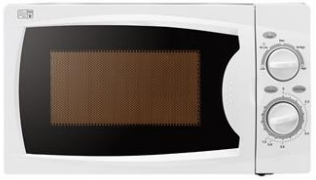






NTC Temperature Sensors

Used for Control Temperature of Home Appliances



Our Thermistor are widely used in home appliances.

Operating Temperature: as required by customers

Types of Thermistor

Thermistor

Thermistor Epoxy dipping type

-30 to +80℃

Thermistor Epoxy potting type
Plastic, PBT, ABS Case

-30 to +80℃

Thermistor Epoxy potting type
Copper alloy Case

-30 to +120℃

Our Thermistor are widely used in Home Appliance.

Thermistor Inorganic adhesive potting type
Stainless Case
Microwave oven Chambers

-20 to +300℃

Thermistor Epoxy potting type
Nickel plated Copper Alloy Case

-30 to +120℃

Thermistor Epoxy potting type
Stainless Case

-30 to +120℃

Thermistor Epoxy potting type
Stainless with Bracket Case

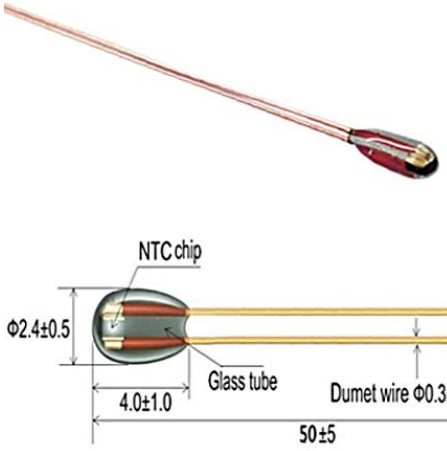
-20 to +120℃

NTC Temperature Sensors

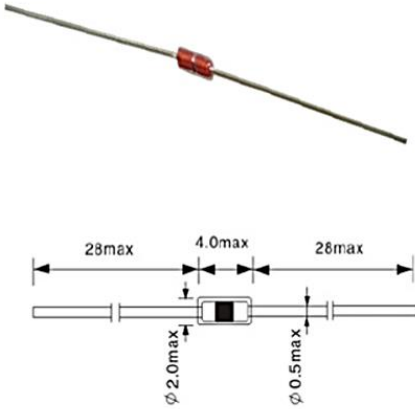
A (CASE)		B	C		D
1. ABS ,PBT Ø 5.5 mm 2. ABS , PBT Ø 6.0 mm 3. ABS , PBT Ø 7.0 mm	Depends on request	25 mm.	AWG 22-26 Flat cable 2 circuit.	Depends on request	Depends on request
4.Copper case Ø 5.0 - Ø7.0 mm 5.Copper with NI plating case. Ø 5.0 - Ø7.0 mm 6.Stainless step deep draw. Ø 2, Ø 3, Ø 4 mm 7.Stainless deep draw with bracket assy. Ø 5.0 – Ø 7.0 mm. 8.Small stainless deep draw with bracket assy. Ø 3.5 mm 9.Epoxy coating Ø 3.5 mm		Depends on request			

NTC Temperature Sensors Separated by Chip Types

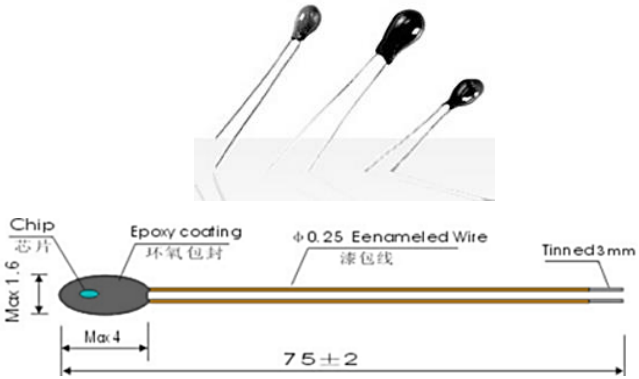
Radial Glass Type



Axial Glass Type



Epoxy Type



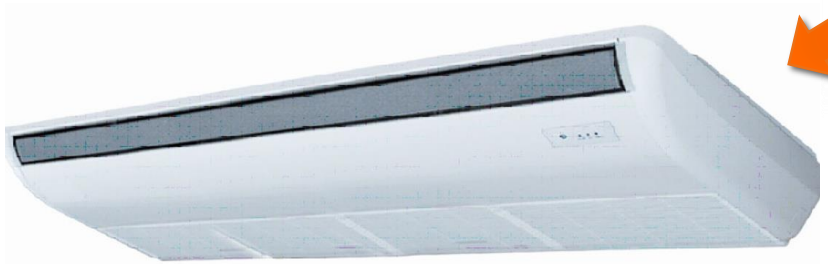
Thermistor chip type	Operating Temperature	R (25˚C)	B constant	Thermal time constant (τ) (air)	Thermal dissipation Constant (δ)
Epoxy type	-40~+120 ˚C	1-1388 K Ω , (Depends on Customer request.)	3200-4600 K. (Depends on Customer request.)	≤ 7 sec	≤ 2 mw/˚C
Diode	-40~+250 ˚C			7 sec	3.0 mw/˚C
Chip in glass	-40~+330 ˚C			6 sec	1.0 mw/˚C

Thermistor Separated by Package Types

Package type	Material	Applications.
	1.ABS 2.PBT	1.Refrigerator 2.Washing Machine
	1.Copper 2.Copper + Nickel plating	1.Air condition 2.Washing Machine
	1.Stainless, Step deep draw	1.Electric shower 2.Washing Machine
	1.Stainless, deep draw with bracket assembly	1. Dishwasher Machine 2. Washing Machine
	1.Stainless, Small case, deep draw with bracket assembly	1. Microwave Oven
	1.Epoxy coating	1. Refrigerator 2. Air conditions

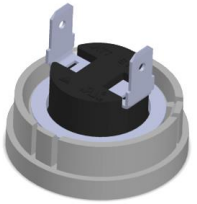
Applications

Air Conditioner



Thermistor Epoxy dipping type
for room temperature
(In door unit)

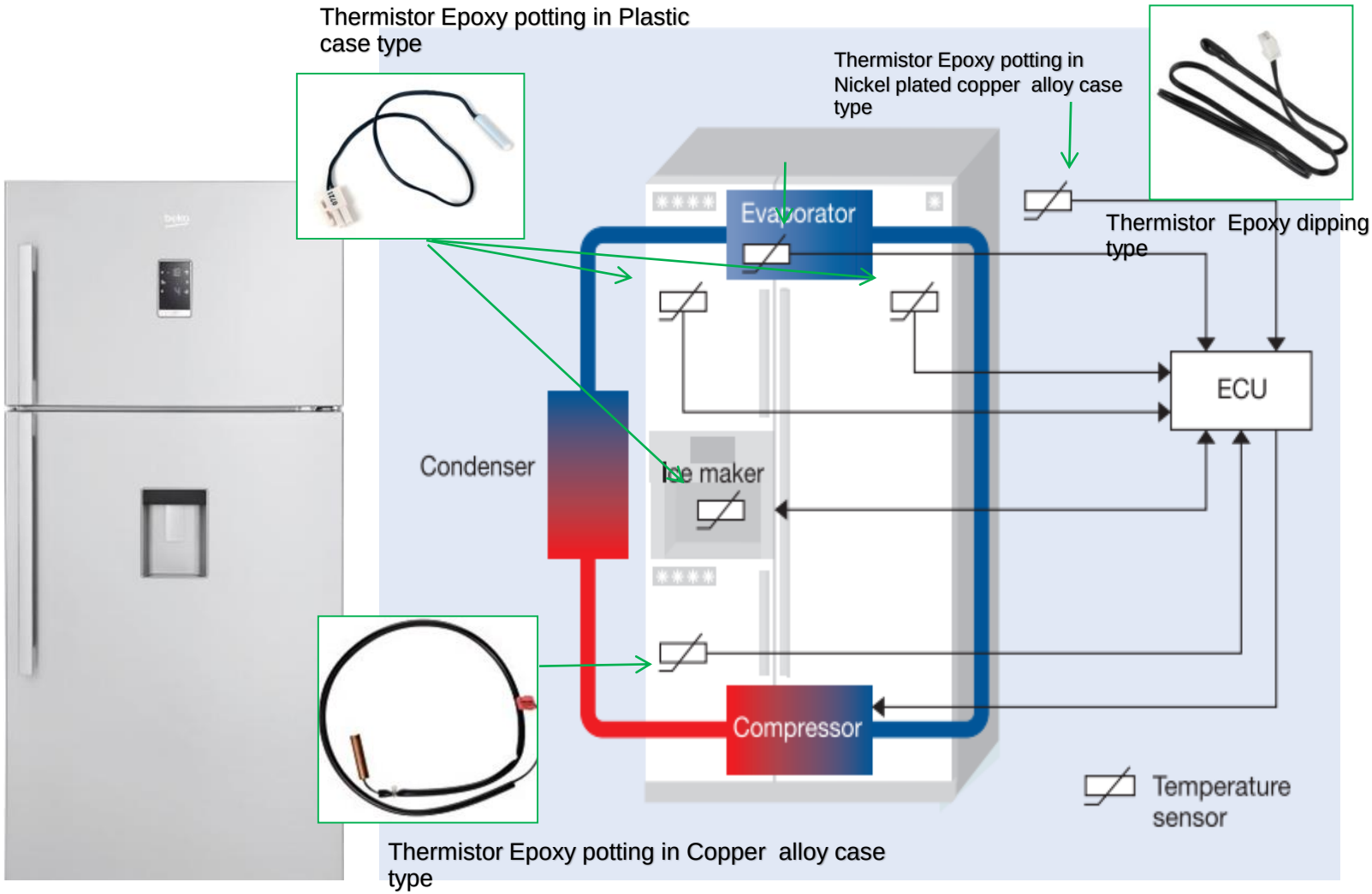
Thermistor Epoxy potting
in Nickel plated
Copper alloy case type for
pipe temperature



Thermostat Over heat
Relay for Compressor
Over heat protection.

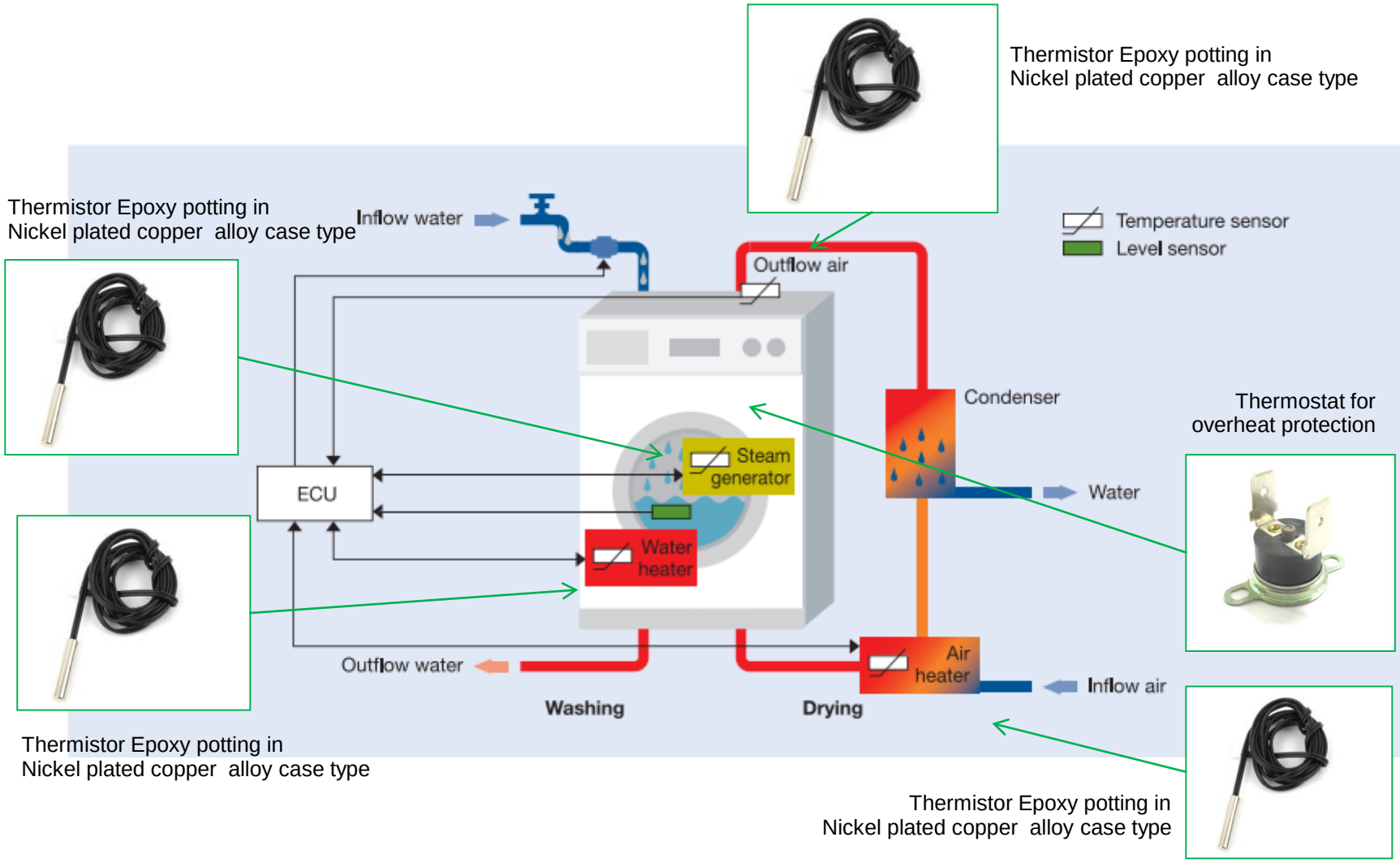
Applications

Refrigerator



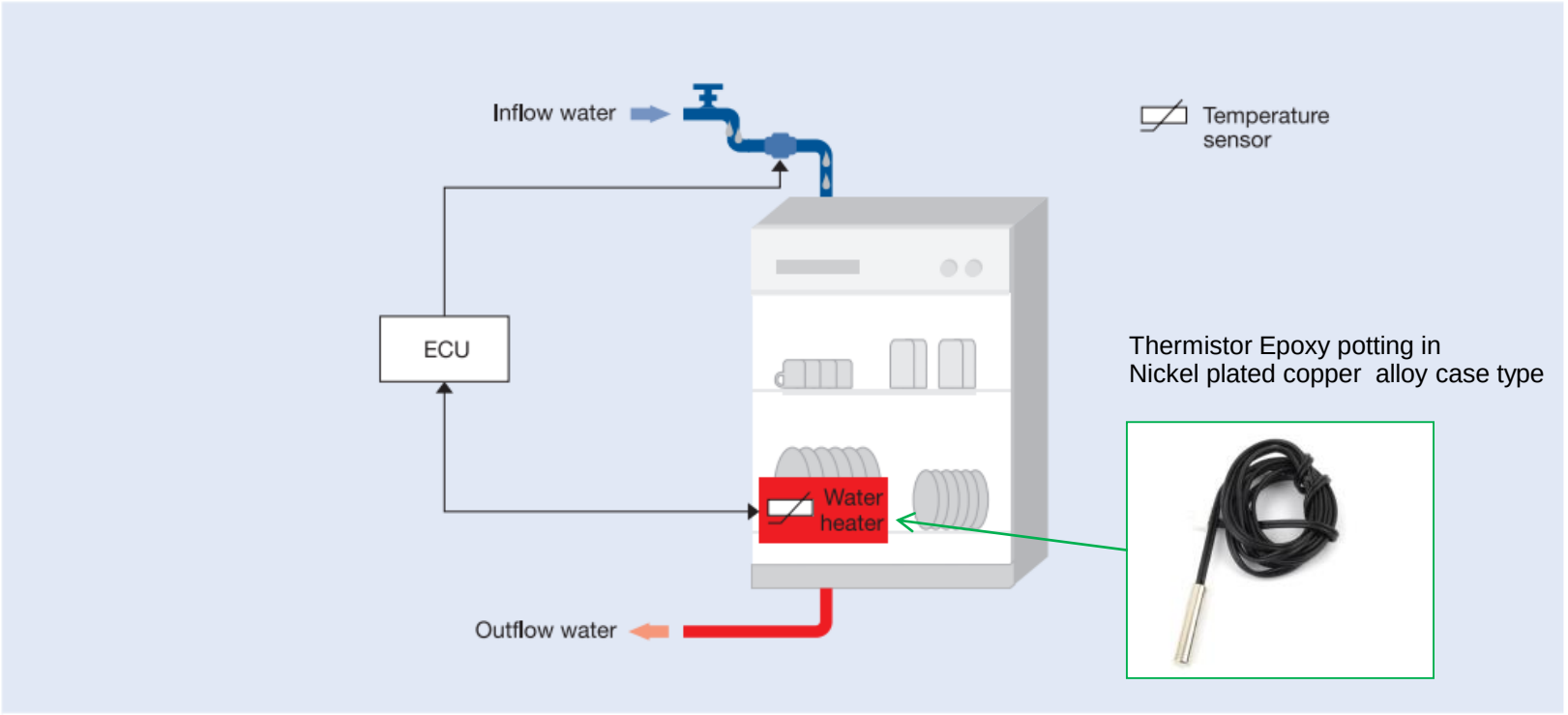
Applications

Washer and Dryer



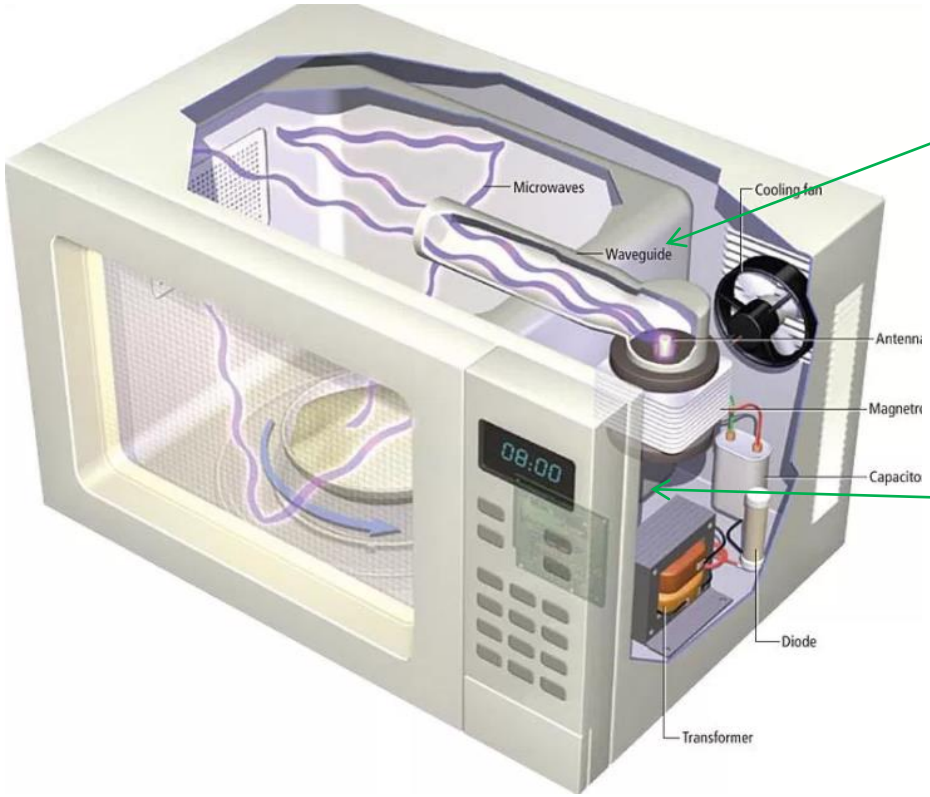
Applications

Dish Washer



Applications

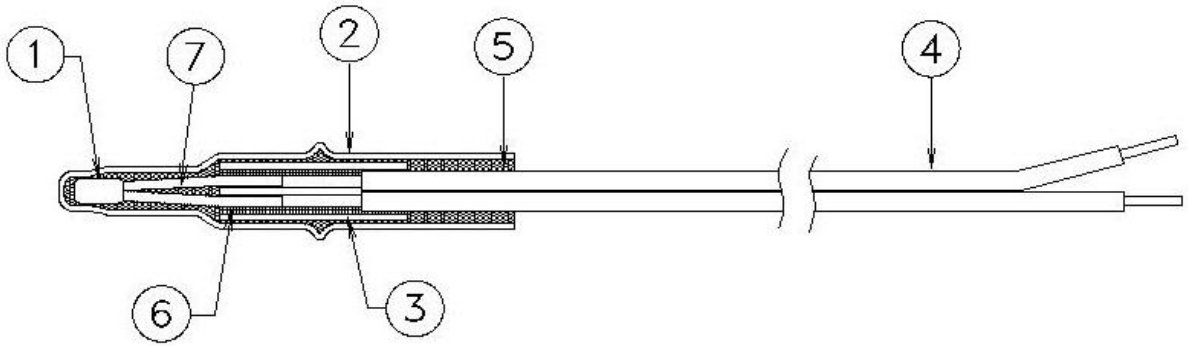
Microwave Oven

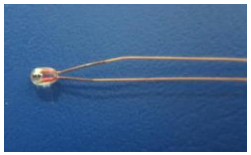


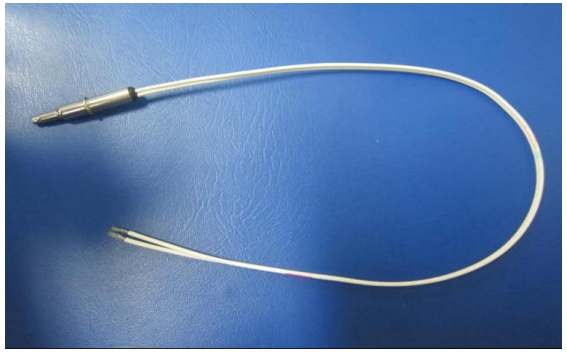
High Temperature Thermistor stainless case type

High Temperature Thermostat Ceramic case type for over heat protection

Thermistor Drawing for Water Heater







OPERATING TEMPERATURE : -20~+105˚C
MAXIMUM OPERATING : 105˚C

NO.	PART CODE	PART NAME	Q'TY	MATERIAL	FINISHED	STANDARD
7	–	POLYIMIDE TUBING	2	POLYIMIDE	–	–
6		EPOXY RESIN	–	–	–	–
5		EPOXY RESIN	–	–	–	–
4		ELECTRIC WIRE (WHITE)	1	0.14 SQ.mm. (PVC 105°C)	–	–
3		BLOCK SUPPORTOR	1	PA 66 30%GF	–	–
2		PROTECTIVE BODY	1	SUS 316L	–	–
1		CHIP IN GLASS NTC THERMISTOR	1	UNG403H353G3		AT 25°C = 40 KΩhm B25°C/85°C = 3530K

TITLE:
CONSTRUCTION DRAWING
THERMISTOR ASSEMBLY

APPROVED BY	CHECKED BY	DESIGNED BY	PREPARED BY
(L.CHARTCHAI)	(M.THEERASAK)	(K.NOPPOL)	(CH.PANATSAYA)

NO.	DATE	REVISIONS	APPROVED	EFFECTIVE
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MODEL : TMN0403530BD1-R001

DRAWING CODE

ADVANCE THERMO TECHNOLOGY CO.,LTD.

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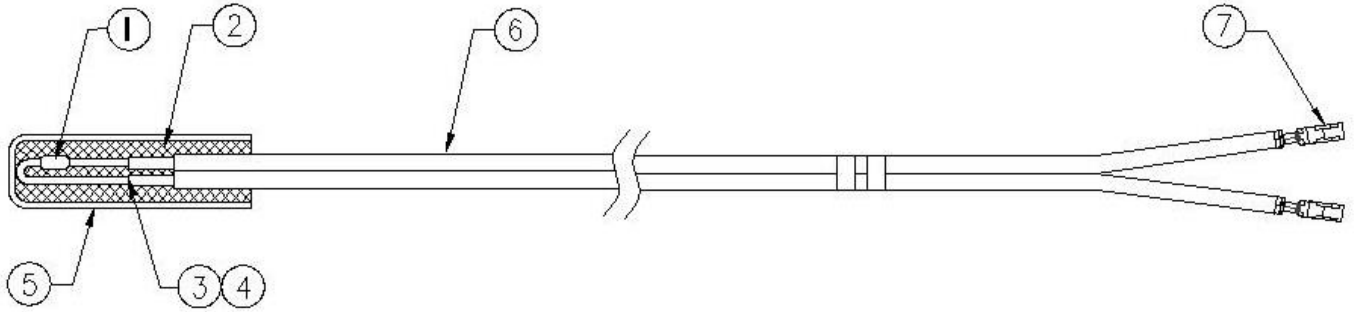
CC 31003

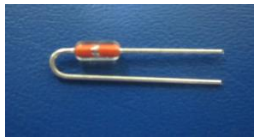
Issued date : Jun 01, 98 Rev. date : Jan 12, 16 Rev. no : 4

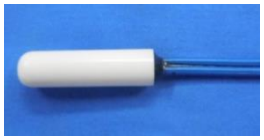
ENG-40103

Thermistor Drawing for Refrigerator (Potting)



OPERATING TEMPERATURE : -50~+105˚C
MAXIMUM OPERATING : 105˚C





7	–	TERMINAL	2	JST : SYF-01T-P0.5A	–	–
6		ELECTRIC WIRE (BLUE COLOR)	1	FLAT RIBBON CABLE 22 AWG (PVC 105'C)	–	–
5		CASE	1	ABS	–	–
4		SOLDER BAR	–	Sn-0.7Cu	–	–
3		SOLDER WIRE	–	Sn-0.7Cu	–	–
2		POTTING EPOXY	–	EPOXY RESIN	–	–
1		THERMISTOR CHIP	1	THERMISTOR CHIP	–	AT 0°C = 8.4 Kohm B -18°C/0°C = 3814K
NO.	PART CODE	PART NAME	Q'TY	MATERIAL	FINISHED	STANDARD

NO.	DATE	REVISIONS	APPROVED	EFFECTIVE
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TITLE:
CONSTRUCTION DRAWING
THERMISTOR ASSEMBLY

APPROVED BY	CHECKED BY	DESIGNED BY	PREPARED BY
(L.CHARTCHAI)	(M.TIRASAK)	(K.NOPPOL)	(CH.PANATSAYA)

MODEL : S301DIB02-R004

DRAWING CODE

ADVANCE THERMO TECHNOLOGY CO.,LTD.

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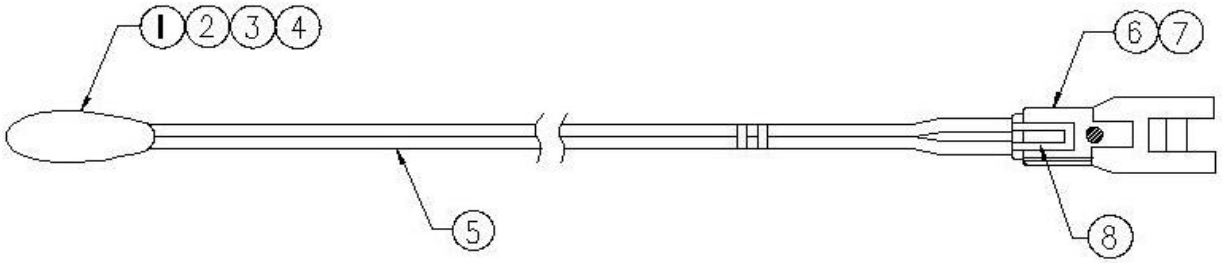
CC 31009

Issued date : Jun 01, 98 Rev. date : Jan 12, 16 Rev. no : 4

ENG-40103

Thermistor Drawing for Refrigerator (Dipped)



OPERATING TEMPERATURE : -40~+105˚C
MAXIMUM OPERATING : 105˚C

NO.	PART CODE	PART NAME	Q'TY	MATERIAL	FINISHED	STANDARD
8	–	RETAINER	1	JST : XMS-02V	–	–
7		TERMINAL	2	JST : SXM-001T-P0.6	–	–
6		HOUSING	1	JST : XMR-02VF	–	–
5		ELECTRIC WIRE	1	26 AWG (PVC 105°C)	–	–
4		SOLDER BAR	–	Sn-0.7Cu	–	–
3		SOLDER WIRE	–	Sn-0.7Cu	–	–
2		COATING RESIN	–	EPOXY RESIN	–	–
1		THERMISTOR CHIP	1	THERMISTOR CHIP	–	AT 25°C =10 Kohm B25°C/50°C =3950K

NO.	DATE	REVISIONS	APPROVED	EFFECTIVE
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TITLE:
CONSTRUCTION DRAWING
THERMISTOR ASSEMBLY

APPROVED BY	CHECKED BY	DESIGNED BY	PREPARED BY
(L.CHARTCHAI)	(M.TIRASAK)	(K.NOPPOL)	(CH.PANATSAYA)

MODEL : S302EPB00-R023
DRAWING CODE
ADVANCE THERMO TECHNOLOGY CO.,LTD.
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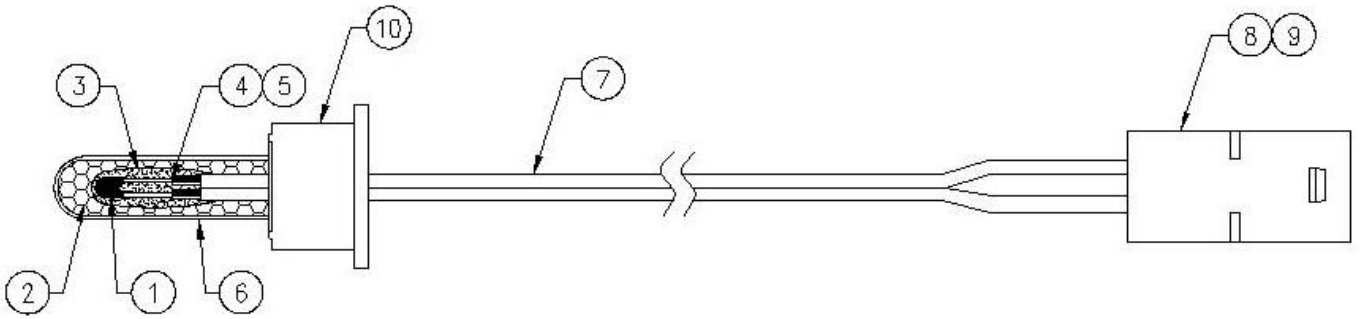
CC 31006

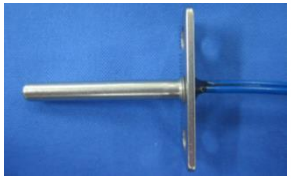
Issued date : Jun 01, 98 Rev. date : Jan 12, 16 Rev. no : 4

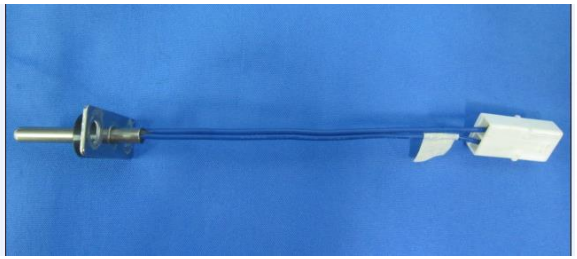
ENG-40103

Thermistor Drawing for Dish Washer



OPERATING TEMPERATURE : -20~+105˚C
MAXIMUM OPERATING : 105˚C





NO.	PART CODE	PART NAME	Q'TY	MATERIAL	FINISHED	STANDARD
10	–	THERMISTOR SEAL	1	SILICON	–	–
9		HOUSING	1	KET : MG620426	–	–
8		TERMINAL	2	KET : ST740464-3	–	–
7		ELECTRIC WIRE	1	22 AWG/105°C, (BLUE COLOR)	–	–
6		CASE	1	SUS304	–	–
5		SOLDER BAR	–	Sn-0.7Cu	–	–
4		SOLDER WIRE	–	Sn-0.7Cu	–	–
3		POTTING RESIN	–	EPOXY RESIN	–	–
2		COATING RESIN	–	EPOXY RESIN	–	–
1		THERMISTOR CHIP	1	EPOXY COATING CHIP	–	AT 50°C =17.59 Kohm B0/C/100°C =3970K

NO.	DATE	REVISIONS	APPROVED	EFFECTIVE
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TITLE:
CONSTRUCTION DRAWING
THERMISTOR ASSEMBLY

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(L.CHARTCHAI)	(M.TIRASAK)	(K.NOPPOL)	(CH.PANATSAYA)

MODEL : S301EPB05-R011-BK

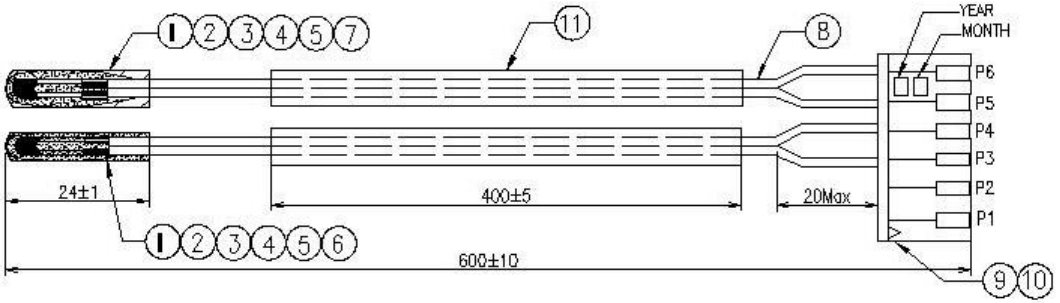
DRAWING CODE: CC 31013

ADVANCE THERMO TECHNOLOGY CO.,LTD.

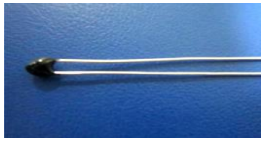
Issued date : Jun 01, 98 Rev. date : Jan 12, 16 Rev. no : 4

ENG-40103

Thermistor Drawing for Air Conditioner



OPERATING TEMPERATURE : 30~+105˚C
MAXIMUM OPERATING : 105˚C



NO.	PART CODE	PART NAME	Q'TY	MATERIAL	FINISHED	STANDARD
11	–	PVC TUBE	2	105'C HEATPROOF PVC TUBE (BLACK)	–	–
10		TERMINAL	4	JWT : A2501T0P-2	–	–
9		HOUSING	1	JWT : A2501H02-6P	–	–
B		ELECTRIC WIRE (BLACK COLOR)	1	26 AWG (PVC 105'C 300V)	–	–
7		SOLDER BAR	1	Su-0.7Cu	–	–
6		SOLDER WIRE	1	Su-0.7Cu	–	–
5		POTTING EPOXY	1	EPOXY RESIN	–	–
4		CASE	1	C1201	–	–
3		CASE	1	C1201	–	–
2		DIPPING EPOXY	–	EPOXY RESIN	–	–
1		THERMISTOR CHIP	1	EPOXY COATING	–	AT 25'C =25 Kohm B25'C/85'C =3324K

NO.	DATE	REVISIONS	APPROVED	EFFECTIVE
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TITLE:
CONSTRUCTION DRAWING
THERMISTOR ASSEMBLY

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MODEL : S301EPBD4-R080
DRAWING CODE

ADVANCE THERMO TECHNOLOGY CO.,LTD.

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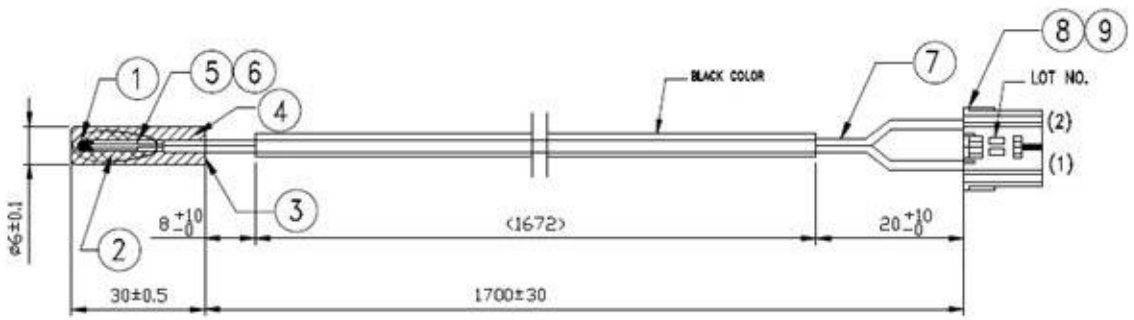
SAMPLE

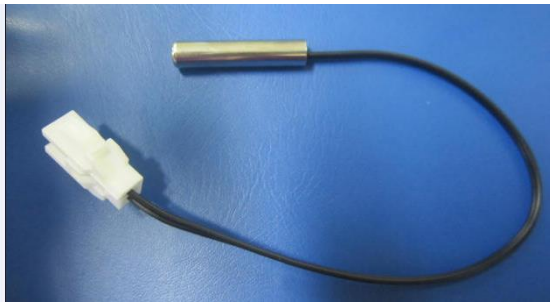
Issued date : Jun 01, 98 Rev. date : Jan 12, 18 Rev. no : 4

ENG-40103

Thermistor Drawing for Washer and Dryer

OPERATING TEMPERATURE : -20~+150˚C
MAXIMUM OPERATING : 150˚C





NO.	PART CODE	PART NAME	Q'TY	MATERIAL	FINISHED	STANDARD
9	–	HOUSING	1	PATTERN : N1020-92D4 (WHITHE)	–	–
8		TERMINAL	2	PATTERN : 172031-M2	–	–
7		ELECTRIC WIRE (BLUE COLOR)	1	CROSSLING POLY DOUBLE INSULATION WIRE (HEAT PROOF 150°C)	–	–
6		SOLDER BAR	–	Sn-0.7Cu	–	–
5		SOLDER WIRE	–	Sn-0.7Cu	–	–
4		POTTING EPOXY	–	EPOXY RESIN	–	–
3		CASE	1	NICKEL PLATE COPPER	–	–
2		DIPPING EPOXY	–	EPOXY RESIN	–	–
1		THERMISTOR CHIP	1	THERMISTOR CHIP	–	AT 115°C =2.158 Kohm B 80°C/115°C =4082K

NO.	DATE	REVISIONS	APPROVED	EFFECTIVE
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TITLE:
CONSTRUCTION DRAWING
THERMISTOR ASSEMBLY

APPROVED BY	CHECKED BY	DESIGNED BY	PREPARED BY
(L.CHARTCHAI)	(M.TIRASAK)	(K.NOPPOL)	(CH.PANATSAYA)

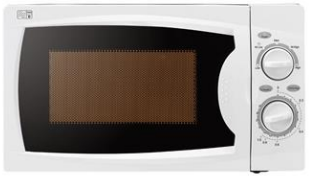
MODEL : S301EPB04-R060 | DRAWING CODE

ADVANCE THERMO TECHNOLOGY CO.,LTD. | – | SAMPLE

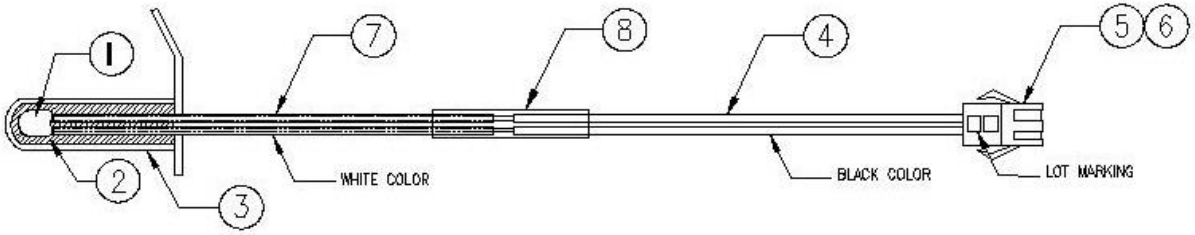
Issued date : Jun 01, 98 Rev. date : Jan 12, 16 Rev. no : 4

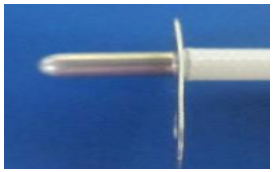
ENG-40103

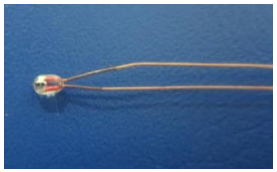
Thermistor Drawing for Microwave Oven

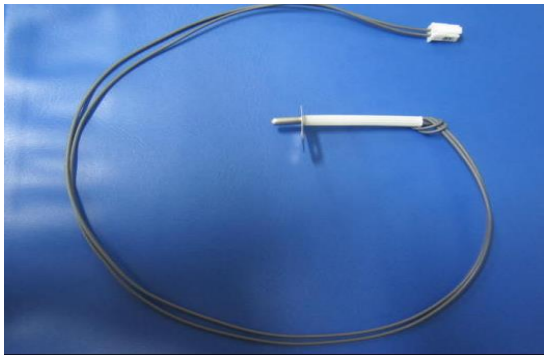


OPERATING TEMPERATURE : -20~+330˚C
MAXIMUM OPERATING : 330˚C









NO.	PART CODE	PART NAME	Q'TY	MATERIAL	FINISHED	STANDARD
8	–	HEAT SHRINKABLE TUBE	2	RSFR-H BLACK 15 mm.	–	–
7		SILICONE GLASS TUBE	2	H-FSG-2G ø0.5 (WHITE)	–	–
6		HOUSING	1	JST : SMP-02V-NC	–	–
5		TERMINAL	2	JST : SHF-001T-0.8 BS	–	–
4		ELECTRIC WIRE (BLACK COLOR)	1	26 AWG (PVC 150°C 300V)	–	–
3		CASE	1	SUS304	–	–
2		POTTING EPOXY	–	EPOXY RESIN	–	–
1		THERMISTOR CHIP	1	CHIP IN GLASS	–	AT 25°C =10 Kohm B25°C/50°C =3950K

NO.	DATE	REVISIONS	APPROVED	EFFECTIVE
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TITLE : CONSTRUCTION DRAWING THERMISTOR ASSEMBLY

APPROVED BY	CHECKED BY	DESIGNED BY	PREPARED BY
(L.CHARTCHAI)	(M.TIRASAK)	(K.NOPPOL)	(CH.PANATSAYA)

MODEL : 5301GLB10-R095

DRAWING CODE

ADVANCE THERMO TECHNOLOGY CO.,LTD.

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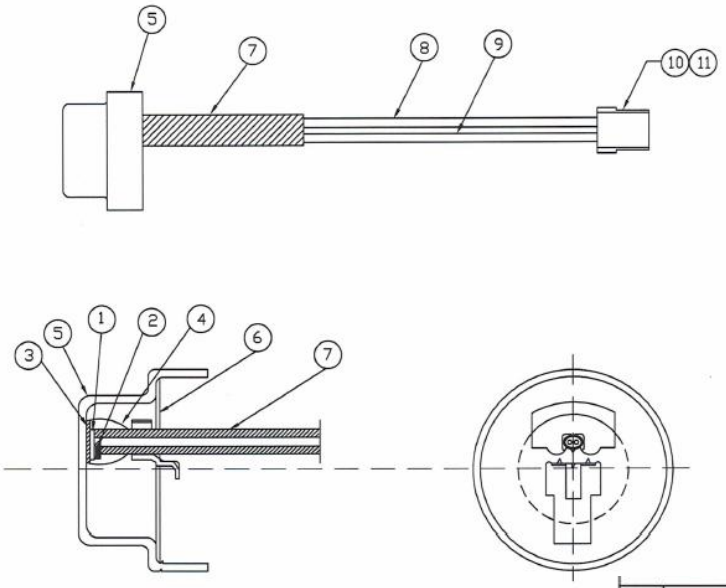
CC 31016

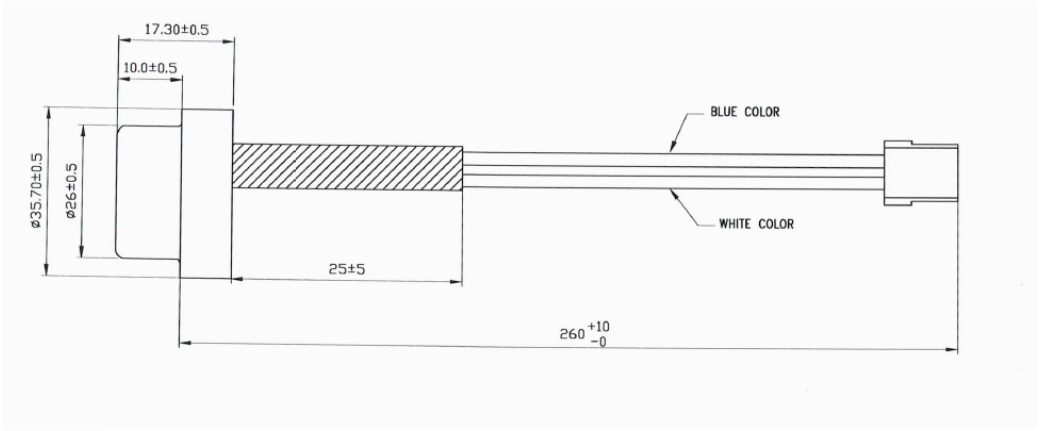
Issued date : Jun 01, 98 Rev. date : Jan 12, 16 Rev. no : 4

ENG-40103

Thermistor Drawing for Rice Cooker

OPERATING TEMPERATURE : -20~+330˚C
MAXIMUM OPERATING : 330˚C





NO.	PART CODE	PART NAME	Q'TY	MATERIAL	FINISHED	STANDARD
11	–	TERMINAL	1	MOLEX : 50351-8000		–
10	–	HOUSING	1	MOLEX : 51103-0300-(Red / 3 pin)		–
9	–	LEAD WIRE	1	SILICON RUBBER INSULATING GLASS BRAIDED ELECTRIC WIRE 7/0.16(WHITH)		–
8	–	LEAD WIRE	1	SILICON RUBBER INSULATING GLASS BRAIDED ELECTRIC WIRE 7/0.16 (BLUE)		–
7	–	PROTECTING TUBE	1	SILICON VARNISH GLASS BRAIDED TUBE (WHITE)		–
6	–	THERMAL PLATE COVER	1	SPGAZ22		T0.6
5	–	THERMAL PLATE	1	A1100P		T1.0
4	–	COATING AGENT	1	SILICON GREASE		–
3	–	INSULATING SHEET	1	SILICON RUBBER		T0.3
2	–	JOINT	1	SOLDER		–
1	–	THERMISTOR CHIP	1	THERMISTOR CHIP (CHIP IN GLASS)		–