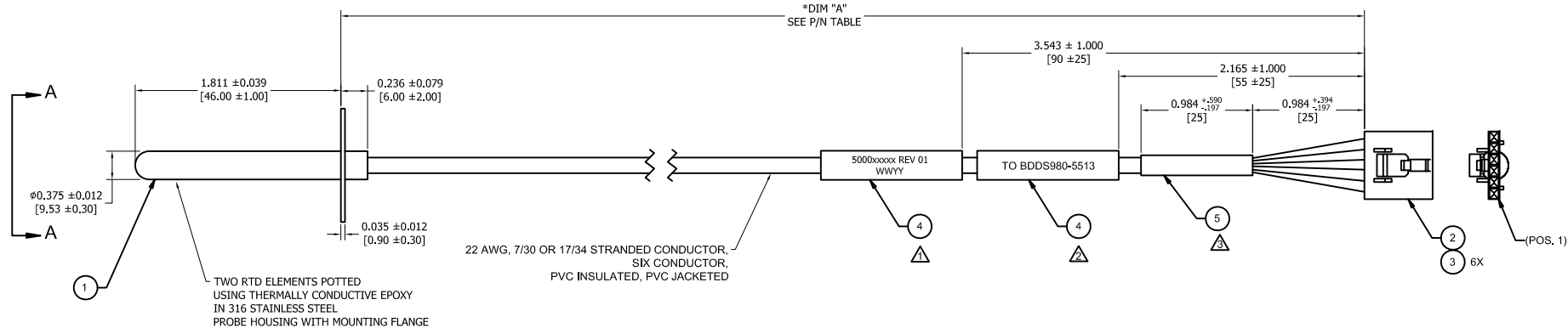


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#### RTD ELEMENT ELECTRICAL CHARACTERISTICS:

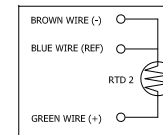
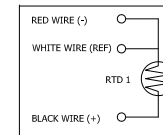
RTD ELEMENT RESISTANCE @ 0°C = 1,000 Ω ± 0.06%  
 RTD ELEMENT ACCURACY @ 0°C = ± 0.15°C  
 TCR = 3,850ppm/°C  
 RTD ELEMENT ACCURACY CLASS = DIN EN 60751 F 0.15 (CLASS "A")  
 MAXIMUM TEMPERATURE RATING = +105°C

#### NOTES:

1. PRINT LABEL WITH THE BD PART NUMBER AND REVISION LEVEL = SEE P/N TABLE, AND DATE OF MANUFACTURE.
2. PRINT LABEL WITH THE INFORMATION SHOWN ON THE FIELD.
3. POSITION THE TUBING (ITEM 5) AS SPECIFIED AND APPLY HEAT
4. DIMENSIONS, FEATURE CONTROL FRAMES, NOTES OR OTHER PARAMETERS DESIGNATED WITH THE SYMBOL \* ARE INSPECTION PARAMETERS. THESE PARAMETERS REQUIRE REPORTING OF DATA BY BD AND/OR THE SUPPLIER, AS DETERMINED BY BD QUALITY ASSURANCE.
5. RoHS COMPLIANT (LEVEL 3)
6. THE CRIMPING OPERATION OF ITEM 3 MUST MEET THE FOLLOWING REQUIREMENTS
  - 6.1 CRIMPING MUST BE PERFORMED WITH A MECHANICAL APPLICATOR THAT IS MANUFACTURED BY OR APPROVED BY THE CONTACT MANUFACTURER.
  - 6.2 A HAND-TOOL CANNOT BE USED TO CRIMP THESE ASSEMBLIES.
  - 6.3 THE TOOLING SET-UP VERIFICATION MUST INCLUDE A CRIMP HEIGHT MEASUREMENT TO ENSURE THAT THE MANUFACTURE'S SPECIFICATION IS MET.
  - 6.4 THE TOOLING SET-UP VERIFICATION MUST INCLUDE STARTING AND END PULL TESTS FOR EACH BUILD SHOWING THAT THE MANUFACTURE'S PULL TEST SPECIFICATION IS MET
7. ALL COMPLETED ASSEMBLIES MUST BE TESTED AS FOLLOWS:
 

\*PRIOR TO TESTING, MEASURE THE AMBIENT TEMPERATURE TO ENSURE THAT IT IS BETWEEN 20 AND 35 DEGREES CELSIUS.

  - 7.1 MEASURE THE RESISTANCE BETWEEN THE BLACK AND RED WIRES (P-1 TO P-2) AND BETWEEN THE GREEN AND BROWN WIRES (P-4 TO P-5). IT MUST BE BETWEEN 1070 AND 1140 OHMS.
  - 7.2 MEASURE THE RESISTANCE BETWEEN THE RED AND WHITE WIRES (P-2 TO P-3) AND BETWEEN THE BROWN AND BLUE WIRES (P-5 TO P-6). IT MUST BE BETWEEN ZERO AND 5 OHMS.
  - 7.3 MEASURE THE RESISTANCE BETWEEN EACH OF THE SIX WIRES AND THE METAL CASE OF THE SENSOR. IT MUST MEASURE OVER 1 MEG OHMS.



WIRE RUN LIST				
WIRE RUN	WIRE SIZE	WIRE COLOR	TO	FUNCTION
1	22 AWG	BLACK	P-1	RTD 1 (+)
2	22 AWG	RED	P-2	RTD 1 (-)
3	22 AWG	WHITE	P-3	RTD 1 (REF)
4	22 AWG	GREEN	P-4	RTD 2 (+)
5	22 AWG	BROWN	P-5	RTD 2 (-)
6	22 AWG	BLUE	P-6	RTD 2 (REF)

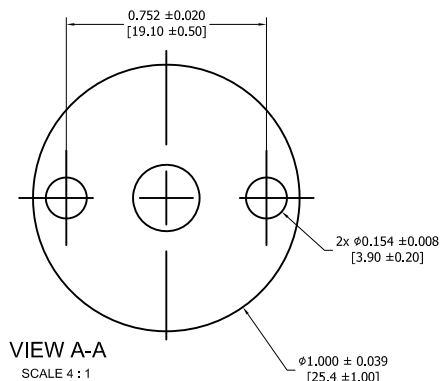




TABLE 1

ITEM	QTY	DESCRIPTION	MFR	DOC#
1	1	RTD Sensor	LITTELFUSE	USW4811
2	1	CONNECTOR, 6 POS., RCPT HSG, TE	TE	104257-5
3	6	CONTACT, 22-26 AWG, D-GOLD	TE	1-104480-3
4	4	LABEL, WRAP-AROUND	BRADY	LAT-39-361-1
5	A/R	TUBING, HEAT SHRINK, 1/4" DIA.	LITTELFUSE	IS10002-08

REFERENCE TO BD DIAGNOSTIC SYSTEMS  
 DRAWING# BDDS980-5537 REV 01 (Except RTD is Pt1000)

REV	DESC	BY	DATE	DCR NO
A	Preliminary Release	MK	11/21/2023	
REVISION HISTORY				

Project Code <b>51204</b>		 <b>Littelfuse®</b>	
 Third Angle Projection			
Units <b>Inch [Millimeter]</b>		Division <b>IBU - Temperature Sensors</b>	
General Tolerances 0.X = ± 0.X 0.XX = ± 0.XX 0.XXX = ± 0.XXX		Title <b>RTD Probe Assembly</b>	
Drawn By <b>MK</b>		Drawing No <b>USW4811</b>	
Date <b>11/21/2023</b>		Rev <b>A</b>	
Size <b>A</b>		Do Not Scale	
		Sheet <b>1 of 1</b>	

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