DOCUMENT CHANGE REQUEST

DCR number 571	Changes required for: MRB decision	Originator: Padraic Moran
Date: 2010/02/03	Date sent: 2010/02/03	Organisation: Enterprise Ireland
Status: IMPLEMENTED		

Title:	Thermistors (thermally Sensitive Resistors) Range 2000 to 100000 Ohms at +25C with a		
Number:	4006/014	Issue:	6

Other documents affected:

Page:

PAGE 15, APPENDIX 'A'

Paragraph:

PAGE 15, APPENDIX 'A'

Original wording:

Proposed wording:

See attached doc:
ESCC 4006014 proposed changes.pdf

Justification:

See attached doc:
ESCC 4006014 proposed changes.pdf

Attachments:

ESCC_4006014_proposed_changes.pdf, null

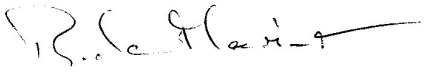
Modifications:

Amend the attachment to DCR571 as follows:
a) The Manufacturer's name used for Appendix 'A' shall remain as 'Betatherm (Ireland)'.

b) Replace the text inserted in the DESCRIPTION OF DEVIATIONS column of Appendix 'A' against each modified & new item, to read as follows:

Para. 9.3.1.4, Insulation Resistance
For Variants 08, 09, 10, 11, 12, Insulation Resistance may be measured in accordance with Betatherm Specification Ref. MFG 12-49-00.

Approval signature:



Date signed:
2010-02-03

FROM

APPENDIX 'A'

AGREED DEVIATIONS FOR BETATHERM IRELAND

ITEMS AFFECTED	DESCRIPTION OF DEVIATIONS
Para. 4.2.2 Deviations from Final Production Tests (Chart II)	Para. 9.2 Thermal Shock For Variants 08, 09, 10, 11, 12 to Testing Level B, Parameter Drift Value Measurements in accordance with Para. 9.3.2 (and para. 4.7.1 of the Detail specification) shall be performed immediately before and after thermal Shock.
Para. 4.2.3 Deviations from Burn-in and Electrical Measurements (Chart III)	Para. 7.4/7.4.1 Check for Lot Failure/Lot Failure During 100% Testing for Variants 08, 09, 10, 11, 12 to Testing Level B, all Parameter Drift or Limit Failures during Parameter for Drift Valur Measurements performed after Thermal Shock during Final Production Tests shall be included in the check for Lot Failure Percent Defective Allowable calculation. The percent Defective shall be referenced against the quantity of components submitted to Burn-in and Electrical Measurements plus any Parameter Drift or Limit failures during Parameter Drift Value Measurements performed after Thermal Shock Para. 9.6 Radiographic Inspection Inspection shall be with a single view such that the component's mounting plane is seated on the X-RAY film holder
Para. 4.2.5 Deviations from Lot Acceptance Tests (Chart V)	Para 9.14.2 Operating Life during Lot Acceptance Testing For Variants 08, 09, 10, 11, 12 amend (f), Data Points, to be as follows: Measurements at intermediate and end points in accordance with Table 6 of the Detail specification at 0, 250, 500, 750 and 1000 ±48 hours.

TO: (next page)

TO:

APPENDIX 'A'

AGREED DEVIATIONS FOR MEAS IRELAND (BETATHERM) LTD.

ITEMS AFFECTED	DESCRIPTION OF DEVIATIONS
Para. 4.2.2 Deviations from Final Production Tests (Chart II)	Para. 9.2 Thermal Shock For Variants 08, 09, 10, 11, 12 to Testing Level B, Parameter Drift Value Measurements in accordance with Para. 9.3.2 (and para. 4.7.1 of the Detail specification) shall be performed immediately before and after thermal Shock. Para. 9.3.1.4 Insulation Resistance The following applies to Variants 08, 09, 10, 11 & 12: Section (b) Special Preparations of para. 9.3.1.4 does not apply. Section (c) Points of Measurement of para. 9.3.1.4 excludes reference to the V-Block. The word 'V-Block' is replaced by the words 'body of the thermistor' Insulation Resistance test method is as per agreed specification # MFG 12-49-00.
Para. 4.2.3 Deviations from Burn-in and Electrical Measurements (Chart III)	Para. 7.4/7.4.1 Check for Lot Failure/Lot Failure During 100% Testing for Variants 08, 09, 10, 11, 12 to Testing Level B, all Parameter Drift or Limit Failures during Parameter for Drift Valur Measurements performed after Thermal Shock during Final Production Tests shall be included in the check for Lot Failure Percent Defective Allowable calculation. The percent Defective shall be referenced against the quantity of components submitted to Burn-in and Electrical Measurements plus any Parameter Drift or Limit failures during Parameter Drift Value Measurements performed after Thermal Shock Para. 9.6 Radiographic Inspection Inspection shall be with a single view such that the component's mounting plane is seated on the X-RAY film holder Para. 9.3.1.4 Insulation Resistance The following applies to Variants 08, 09, 10, 11 & 12: Section (b) Special Preparations of para. 9.3.1.4 does not apply. Section (c) Points of Measurement of para. 9.3.1.4 excludes reference to the V-Block. The word 'V-Block' is replaced by the words 'body of the thermistor' Insulation Resistance test method is as per agreed specification # MFG 12-49-00.
Para. 4.2.4 Deviation from Qualification Tests (Chart IV)	Para. 9.3.1.4 Insulation Resistance The following applies to Variants 08, 09, 10, 11 & 12: Section (b) Special Preparations of para. 9.3.1.4 does not apply. Section (c) Points of Measurement of para. 9.3.1.4 excludes reference to the V-Block. The word 'V-Block' is replaced by the words 'body of the thermistor' Insulation Resistance test method is as per agreed specification # MFG 12-49-00.
Para. 4.2.5 Deviations from Lot Acceptance Tests (Chart V)	Para 9.14.2 Operating Life during Lot Acceptance Testing For Variants 08, 09, 10, 11, 12 amend (f), Data Points, to be as follows: Measurements at intermediate and end points in accordance with Table 6 of the Detail specification at 0, 250, 500, 750 and 1000 ±48 hours. Para. 9.3.1.4 Insulation Resistance The following applies to Variants 08, 09, 10, 11 & 12: Section (b) Special Preparations of para. 9.3.1.4 does not apply. Section (c) Points of Measurement of para. 9.3.1.4 excludes reference to the V-Block. The word 'V-Block' is replaced by the words 'body of the thermistor' Insulation Resistance test method is as per agreed specification # MFG 12-49-00.

JUSTIFICATION:

1. The name of the company has changed to MEAS IRELAND (BETATHERM) LTD.
2. The use of the V-Block is not optimal for the testing of ESCC 4006/014 type devices with respect to issues such as clamping of the device and also contact to non-conductive surfaces of the device. The proposed method as per MFG 12-49-00 uses solder balls to surround the device enabling all surfaces to always have good contact with the solder balls.