DOCUMENT CHANGE REQUEST

DCR number 333	Changes required for: General	Originator: Jude Neylon
Date: 2007/04/17	Date sent: 2007/04/17	Organisation: Enterprise Ireland
Status: IMPLEMENTED		

Title:	Thermistors (thermally Sensitive Resistors) Range 2000 to 100000 Ohms at +25C with a		
Number:	4006/014	Issue:	4

Other documents affected:

Page:

A. 4.2.3 Deviations from Burn-in and Electrical Measurements(Chart III)

B. Appendix "A"- Agreed Deviations for Betatherm (Ireland)

Paragraph:

A. 4.2.3 Deviations from Burn-in and Electrical Measurements(Chart III)

B. Appendix "A"- Agreed Deviations for Betatherm (Ireland)

Original wording:

Proposed wording:

A. Radiography: Radiography for variants 08, 09, 10 and 11 shall be conducted in one plane. The orientation shall be with the Aluminium Housing seated on the x ray film holder.

B. Column 1: 4.2.3 Deviations from Burn-in and Electrical Measurements(Chart III). Variants 08, 09, 10 and 11

Column 2: Para. 9.6. Deviations from Radiography. Radiography for shall be conducted in one plane. The orientation shall be with the Aluminium Housing seated on the x ray film holder.

Justification:

Reference: Attached report "X R Justification" dated 26th March 2007.

During the ESCC Qualification Kick Off Meeting at Betatherm on March 21st 2006 the following was agreed.

ACTION 2: Betatherm to investigate the value of the second x ray and to make a proposal to ESCC for its elimination with back up information. If accepted this would result in a DCR to the Detail Specification for the exclusion of second view.

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The analysis will be conducted on the qualification batch

Evaluation testing of ESCC 4006/014/08B has shown that Radiography in a second plane does not add further value to the data. To date 5,000 plus radiographs have shown that one plane is sufficient to record the assembly method and detect any possible assembly defects. Electrical testing at high â..low temperatures is a better method of detecting potential assembly problems. The X ray is conducted at room temperature abut the High Low temperature testing raises the possibility of leads shorting due to movement due to temperature changes.

In accessing the x rays in one plane versus two planes it is obvious that the second plane gives limited additional information. Even when assessing the probes in real time during the crimp nonconformance the data from the real time equipment was of limited use. It is difficult when viewing two planes or real time images to gauge the distance between two wires. This is due to the errors of depth of field.

As was stated previously it is important to have an assembly record of each part but the real test of the assembly is the High/Low tests that may detect short/open circuits or poor contact.

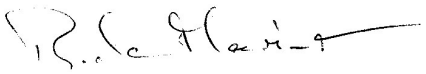
Attachments:

X_R_Justification.doc, X_RAY_DCR_02.DOC, null

Modifications:

The deviations to the generic specification should only be included in the Appendix for Betatherm and not in para 4.2.3. of the Detail spec (item 'A.' of the original DCR is deleted).
For item 'B.' the following alternate wording shall be used:
Column 2: 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.

Approval signature:



Date signed:

2007-04-17