

IEC QUALITY ASSESSMENT SYSTEM (IECQ)

covering Electronic Components,
Assemblies, Related Materials and Processes

For rules and details of the IECQ visit www.iecq.org

IECQ Certificate of Conformity Capability

IECQ Certificate No.: IECQ-C BSI 15.0002 Issue No.: 3 Status: Current

Supersedes: <u>IECQ-C BSI 15.0002 Issue 2</u> **Issue Date: 2018/11/09 Org Issue: 1981/08/01**

CB Reference No.: E039/CA Issue 12 Expiration: 2021/11/30

Graphic Plc

Down End, Lords Meadow Industrial Estate
Crediton, Devon
EX17 1HN
United Kingdom

The organization has developed and implemented procedures and related processes which have been assessed by the IECQ Certification Body issuing this certificate and found to comply with the applicable requirements of the IECQ Approved Component Scheme "Capability Certification" which is in accordance with the Basic Rules IECQ 01 "Rules of Procedure", IECQ 03-1 "IECQ General Requirements for all Schemes" and IECQ 03-3 Annex D "IECQ Approved Components Scheme" of the IEC Quality Assessment System for Electronic Component (IECQ), and in respect of standard(s) or specification(s):

- BS EN 123 000 (1992 Amd 1) Harmonized system of quality assessment for electronic components. Generic specification: printed boards
- BS EN 123 100 (1992 Amd 1) Single and double sided printed boards with plain holes
- BS EN 123 200 (1992 Amd 1) Single and double sided printed boards with plated through holes
- BS EN 123 300 (1992 Amd 1 & 2) Multilayer printed boards
- BS EN 123 400 (1992 Amd 1) Flexible printed boards without through connections
- BS EN 123 500 (1992 Amds 1&2) Flexible printed boards with through connections
- BS EN 123 600 (1997) Flex-rigid multilayer printed boards with through connections

Process Manual Reference: GE/CM

Details of Components/Assemblies/Materials:

Printed Wiring Boards

-- Attached Schedule: E039_CA Issue 12 Scope.pdf --

Issued by the Certification Body (CB): BSI

Kitemark Court, Davy Avenue Knowlhill, Milton Keynes MK5 8PP United Kingdom

Authorized person:

Paul Turner







The validity of this certificate is maintained through on-going surveillance audits by the IECQ CB issuing this certificate.

This Certificate of Conformity may be suspended or withdrawn in accordance with the Rules of Procedure of the IECQ System and its Schemes.

This certificate and any schedule(s) may only be reproduced in full.

This certificate is not transferable and remains the property of the issuing IECQ CB. $\label{eq:certificate}$

The Status and authenticity of this certificate may be verified by visiting $\underline{\text{www.iecq.org}}$



IEC QUALITY ASSESSMENT SYSTEM (IECQ)

covering Electronic Components,
Assemblies, Related Materials and Processes

For rules and details of the IECQ visit www.iecq.org

Schedule of Scope to Certificate of Conformity

Approved Component - Capability

IECQ Certificate No.: IECQ-C BSI 15.0002
CB Certificate No.: E039/CA

Schedule Number: IECQ-C BSI 15.0002-S Rev No.: 12 Revision Date: 2018/11/09 Page 1 of 2

Board Types: Rigid single and double-sided with plain holes BS 123100-003

Rigid double-sided with plated-through holes BS 123200-003

Rigid multi-layer BS 123300-003

Flexible single and double sided without-through BS 123400-003

connections

Flexible double-sided with through-connections BS 123500-003

Flex-rigid multi-layer with through-connections BS 123600-003

Base Materials: Epoxide Woven Glass

Polyimide Film

Board Size: 610 mm x 457 mm Maximum BS EN 123 300

610 mm x 457 mm Maximum BS EN 123 100, BS EN 123 200

610 mm x 457 mm Maximum BS EN 123 400, BS EN 123 500 610 mm x 457 mm Maximum BS EN 123 600

Conductors: Minimum Width: $100 \mu m \pm 25 \mu m$

Minimum Spacing: $100 \, \mu \text{m}$ $\pm 25 \, \mu \text{m}$

Number of

Layers:

24 Maximum

Plated-through 0.30 mm Minimum finished for component mounting

hole diameter: 0.30 mm Minimum drilled via hole

Aspect ratio: 9:1 Maximum

t



IEC QUALITY ASSESSMENT SYSTEM (IECQ)

covering Electronic Components,
Assemblies, Related Materials and Processes

For rules and details of the IECQ visit www.iecq.org

Schedule of Scope to Certificate of Conformity

Approved Component - Capability

IECQ Certificate No.: IECQ-C BSI 15.0002
CB Certificate No.: E039/CA

Schedule Number: IECQ-C BSI 15.0002-S Rev No.: 12 Revision Date: 2018/11/09 Page 2 of 2

Finishes: * Hot Air Solder Levelling

Liquid Photopolymer Solder Resist

Legend; Thermally Cured ENIG surface finish

Additional: Bonded Heatsinks: Anodised Aluminium

Blind and Buried Via Holes Rigidisers / Stiffeners

* These finishes meet the solderability requirements after accelerated ageing.

