



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 Approval

Approved Process - Capability Approval

IECQ Certificate No.: IECQ-C BSI 14.0010

CB Certificate No.: E015/CA

Schedule Number: IECQ-C BSI 14.0010-S Rev No.: 17 Revision Date: 2015/07/14 Page 1 of 3

| | | |
|--------------------------|--|-------------------------------------|
| Board Types: | Rigid single and double-sided with plain holes | BS CECC 23100-003 |
| | Rigid double-sided with plated-through holes | BS CECC 23200-003 |
| | Rigid multi-layer | BS CECC 23300-003 CECC 23300-003 |
| | Flexible single and double sided without-through connections | CECC 23400-003 |
| | Flexible single and double-sided with through-connections | CECC 23500-003 |
| | Flex-rigid multi-layer with through-connections | BS CECC 23600-801 |
| | Flex-rigid double-sided with through-connections | BS CECC 23700-801 |
| | Flexible Multi-layer with through connections | BS CECC 23800-801 |
| Base Materials: | Epoxide Woven Glass Polyimide Woven Glass Polyimide Film Acrylic and Epoxide Adhesive | |
| Board Size: | 580 mm x 430 mm Maximum | BS EN 123 300 |
| | 580 mm x 430 mm Maximum | BS EN 123 100, 200 |
| | 430 mm x 370 mm Maximum | BS EN 123 400, 500, 600, 700, 800 |
| Number of Layers: | 24 Maximum | BS EN 123 300 |
| | 12 Maximum | BS EN 123 600 |
| Conductors: | Minimum Width: 80 μ m \pm 30 % | |
| | Minimum Spacing: 80 μ m \pm 30 % | |

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BSI, Kitemark Court Davy Avenue Knowlhill Milton Keynes MK5 8PP UK





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Plated through 0.45 mm Minimum (finished) for component mounting
Hole Diameter: 0.30 mm Minimum (drilled) via hole

Aspect Ratio: 9.1 : 1 Maximum

Finishes: *Electroplated Tin-Lead
 *Tin-Lead; IR or Hot Oil fused
 *Hot Air Solder Levelling
 *Selective Nickel / Tin lead
 Electroless Nickel/Gold;
 2.5µm Gold over Nickel Edge Contacts
 2.5µm Gold over Copper Edge Contacts

Organic Finishes: Photopolymer solder resist, imageable liquid resist
 Solder resist, oven or UV cured
 Legend, oven or UV cured

Additional: Epoxide Woven Glass Stiffeners
 Blind vias / Micro vias /Buried Vias
 (Adjacent, Non-adjacent layers & >2 layers)

 Bonded Heat Sinks surface / sandwiched
 Copper
 Aluminium

*These features meet the requirements for accelerated ageing when tested in accordance with BS 6221 Part 2,14a.

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Demonstration of Impedance Control:

| | | |
|--------------------------------|---|------------------------------|
| Board types: | Rigid double sided with plated-through holes. | BS CECC 23200-003 |
| | Rigid Multilayer | BS CECC 23300-003 |
| Materials: | Epoxide Woven Glass Polyimide Woven Glass | |
| Board Size: | 458 mm x 372 mm | Maximum |
| No. of Layers: | 24 | Maximum |
| Conductors: | Minimum Width | 100 μ m \pm 50 μ m |
| | Minimum Spacing | 100 μ m \pm 50 μ m |
| Impedance Demonstrated: | 50 Ω to 110 Ω | |
| Declared Tolerance: | \pm 7 % to \pm 25 % (as defined in the Customer Detail Specification) | |
| Geometries: | Stripline Microstrip Differential Impedance | |

This supplement describes the manufacturer's capability to produce printed boards which feature control of characteristic impedance, as described in clause 4.1.4 of BS CECC 23300-003.

Not all features can be achieved in combination.