



IECQ Certificate of Conformity Qualification

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|-----------------------|--|-------------|------------|------------|------------|
| IECQ Certificate No.: | IECQ-C BSI 15.0009 | Issue No.: | 6 | Status: | Current |
| Supersedes: | IECQ-C BSI 15.0009 Issue 5 | Issue Date: | 2021/09/29 | Org Issue: | 2005/10/25 |
| CB Reference No.: | E1274/F Issue 10 | Expiration: | 2024/09/30 | | |

Dongguan Littelfuse Electronics Co Ltd
Nanfang East Road, Beiche
Humen Town, Dongguan
GuangDong
China

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 "Qualification Approval" 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 C "IECQ Approved Components Scheme" of the IEC Quality Assessment System for Electronic Component (IECQ), and in respect of standard(s) or specification(s):

- For a complete list of standards and specifications see the attached schedule of scope.

Process Manual Reference: **DG1-QA75-0008 & DG1-QA75-0012**

Details of Components/Assemblies/Materials:

Thermally Protected Varistors
Product Series: TMOV and iTMOV

-- Attached Schedule: E1274_F Scope Issue 10.pdf --

Issued by the Certification Body (CB): BSI

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

Authorized person:
Paul Turner

PT _____



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This Certificate of Conformity may be suspended or withdrawn in accordance with the Rules of Procedure of the IECQ System and its Schemes.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

IECQ Certificate No.: IECQ-C BSI 15.0009

CB Certificate No.: E1274/F

Schedule Number: IECQ-C BSI 15.0009-S Rev No.: 10 Revision Date: 2021/09/29 Page 1 of 3

Manufacturer's Approval Number: M1069 IECQ

Factory Code: LIL

Place(s) of Manufacture: Nanfang East Road, Humen Town, Dongguan, China

| Approved Standard(s)/Specification(s) | Title |
|---------------------------------------|---|
| BS EN IEC 61051-1 {2018} | Varistors for use in electronic equipment. Generic specification. |
| BS IEC 61051-2 {1992, +A1:2009} | Harmonized system of quality assessment for electric components. Varistors for use in electronic equipment. Sectional specification for surge suppression varistors |
| IEC 61051-2-2 {1991-02} | Varistors for use in electronic equipment - Part 2: Blank detail specification for zinc oxide surge suppression varistors. Assessment level E. |
| BS EN 60950-1 {2006 + A2 2013} | Information technology equipment. Safety. General requirements - Annex Q Components. |
| IEC 60950-1 {Ed2.2, 2013-05} | Information technology equipment – Safety – Part 1: Annex Q – Voltage Dependent Resistors (VDRs) |
| EN 62368-1:2014 {2014} | Audio/video, information and communication technology equipment - Part 1: Safety Requirements – Annex G Components |
| IEC 62368-1 {2018} | Audio/video, information and communication technology equipment - Part 1: Safety Requirements – Annex G Components |

| Test Report | Dated | Accepted by BSI |
|--------------------------|----------------|-------------------|
| TR002 | June 2005 | 20 September 2005 |
| TR009 (incl. Revision 1) | April 2007 | 23 April 2007 |
| TR011 | May 2007 | 22 June 2007 |
| TR012 | July 2009 | 16 October 2009 |
| TR015 | August 2010 | 1 October 2010 |
| TRC040 | September 2020 | 17 November 2020 |

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CB Certificate No.: E1274/F

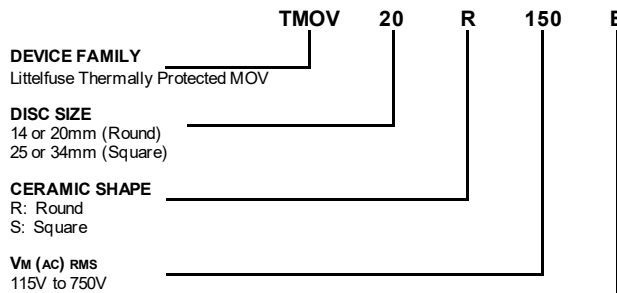
Schedule Number: IECQ-C BSI 15.0009-S

Rev No.: 10

Revision Date: 2021/09/29

Page 2 of 3

Non Lead (Pb) Free devices:

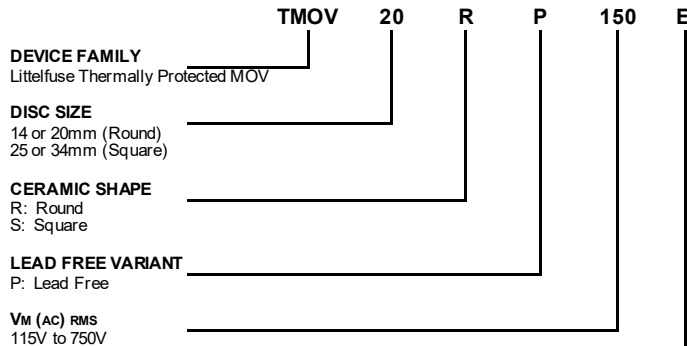


Note:
The thermal cut-off has a nominal opening temperature of 182°C.

The above Product Key may be followed by additional suffixes to cover available customer options.

Series Designator
E: 2-Leaded TMOV Varistor Series Supplied in Bulk Pack with 7.5mm lead spacing.
M: 3-Leaded iTMOV Varistor Series Supplied in Bulk Pack with 7.5mm lead spacing (between leads 1 & 2) (Available in 20mm Round and 34mm Square only)

Lead (Pb) Free devices:



Note:
The thermal cut-off has a nominal opening temperature of 215°C.

The above Product Key may be followed by additional suffixes to cover available customer options.

Series Designator
E: 2-Leaded TMOV Varistor Series Supplied in Bulk Pack with 7.5mm lead spacing.
M: 3-Leaded iTMOV Varistor Series Supplied in Bulk Pack with 7.5mm lead spacing (between leads 1 & 2) (Available in 20mm Round and 34mm Square only)

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Rev No.: 10

Revision Date: 2021/09/29

Page 3 of 3

Certified Parts:

Parts as detailed in QC 42201-C001 and as demonstrated by testing in accordance with QC 42201-A001 and therefore limited in the matrix following.

| Device Rating (Vac) | Applied Overvoltage (Vac) | Limited Current (A) |
|------------------------|------------------------------|------------------------|
| 115 | 240 | 0.125, 0.5, 2.5, 5.0 |
| 130 | 240 | 0.125, 0.5, 2.5, 5.0 |
| 140 | 240 | 0.125, 0.5, 2.5, 5.0 |
| 150 | 240 | 0.125, 0.5, 2.5, 5.0 |
| 175 | 240 | 0.125, 0.5, 2.5, 5.0 |
| 180 | 240 | 0.125, 0.5, 2.5, 5.0 |
| 200 | 415 | 0.125, 0.5, 2.5, 5.0 |
| 230 | 415 | 0.125, 0.5, 2.5, 5.0 |
| 250 | 415 | 0.125, 0.5, 2.5, 5.0 |
| 275 | 415 | 0.125, 0.5, 2.5, 5.0 |
| 300 | 480 | 0.125, 0.5, 2.5, 5.0 |
| 320 | 480 | 0.125, 0.5, 2.5, 5.0 |
| 330 | 480 | 0.125, 0.5, 2.5, 5.0 |
| 350 | 480 | 0.125, 0.5, 2.5, 5.0 |
| 385 | 600 | 0.125, 0.5, 2.5, 5.0 |
| 420 | 600 | 0.125, 0.5, 2.5, 5.0 |
| 440 | 600 | 0.125, 0.5, 2.5, 5.0 |
| 460 | 600 | 0.125, 0.5, 2.5, 5.0 |
| 510 | 1000 | 0.125, 0.5, 2.5, 5.0 |
| 550 | 1000 | 0.125, 0.5, 2.5, 5.0 |
| 575 | 1000 | 0.125, 0.5, 2.5, 5.0 |
| 620 | 1000 | 0.125, 0.5, 2.5, 5.0 |
| 625 | 1000 | 0.125, 0.5, 2.5, 5.0 |
| 660 | 1000 | 0.125, 0.5, 2.5, 5.0 |
| 680 | 1000 | 0.125, 0.5, 2.5, 5.0 |
| 750 | 1000 | 0.125, 0.5, 2.5, 5.0 |

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