

VI ChiP DCM3623 and DCM2322 Flammability Review

Vicor dc-dc converters are evaluated to IEC/EN/UL 60950-1 and 62368-1. As part of this evaluation the flammability rating of the major components are reviewed.

UL 94, Standard for Safety, Tests for Flammability of Plastic Materials for Parts in Devices and Appliances

| Component Flammability Ratings | | | | |
|-----------------------------------------------------|-----------------|------------|----------------|-----------|
| Part | Material | UL R/C CCN | UL 94 V rating | UL File # |
| Molding | Sumitomo | QMFZ2 | V-0 | E41429 |
| Molding (Alt.) | Hitachi/Resonac | QMFZ2 | V-0 | E42956 |
| PCB | FR4 | ZPMV2 | V-0 | Various |
| Header | Dupont Zytel | QMFZ2 | V-0 | E41938 |
| See IEC IECEE TUV CB Test Report Number 7215621-100 | | | | |

In addition to the material review, the DCM3623 and DCM2322 ChiPs were tested to the applicable flame tests of the following standards:

IEC 60695-11-10, Fire hazard testing – Part 11-10: Test flames – 50W Horizontal and Vertical flame test methods

IEC 60695-11-5, Fire hazard testing – Part 11-5: Test flames – Needle-flame test method

EN 45545-2, Fire protection on railway vehicles, Part 2: Requirements for behavior of materials and components (Requirement R26)

| | Report Number# | Standard |
|---------|------------------|-------------------------------------|
| DCM2322 | 518702 (Issue 1) | IEC 60695-11-10, Vertical Burn Test |
| DCM2322 | 520359 (Issue 1) | EN 60695-11-5, Needle Flame Test |
| DCM2322 | 520361 (Issue 3) | EN 45545-2, R26 Vertical Burn Test |
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| DCM3623 | 520358 (Issue 1) | IEC 60695-11-10, Vertical Burn Test |
| DCM3623 | 520360 (Issue 1) | EN 60695-11-5, Needle Flame Test |
| DCM3623 | 520362 (Issue 2) | EN 45545-2, R26 Vertical Burn Test |