

6W LMT3811 75.0:1 Transformer

DESCRIPTION

This document describes and specifies the electrical and mechanical characteristics of the SGE2645-1G high voltage transformer for CCFL inverter power supplies. SGE2645-1G is the RoHS compliant and Lead free transformer. For Reliability and Safety Specification, refer to SGE2606-2.

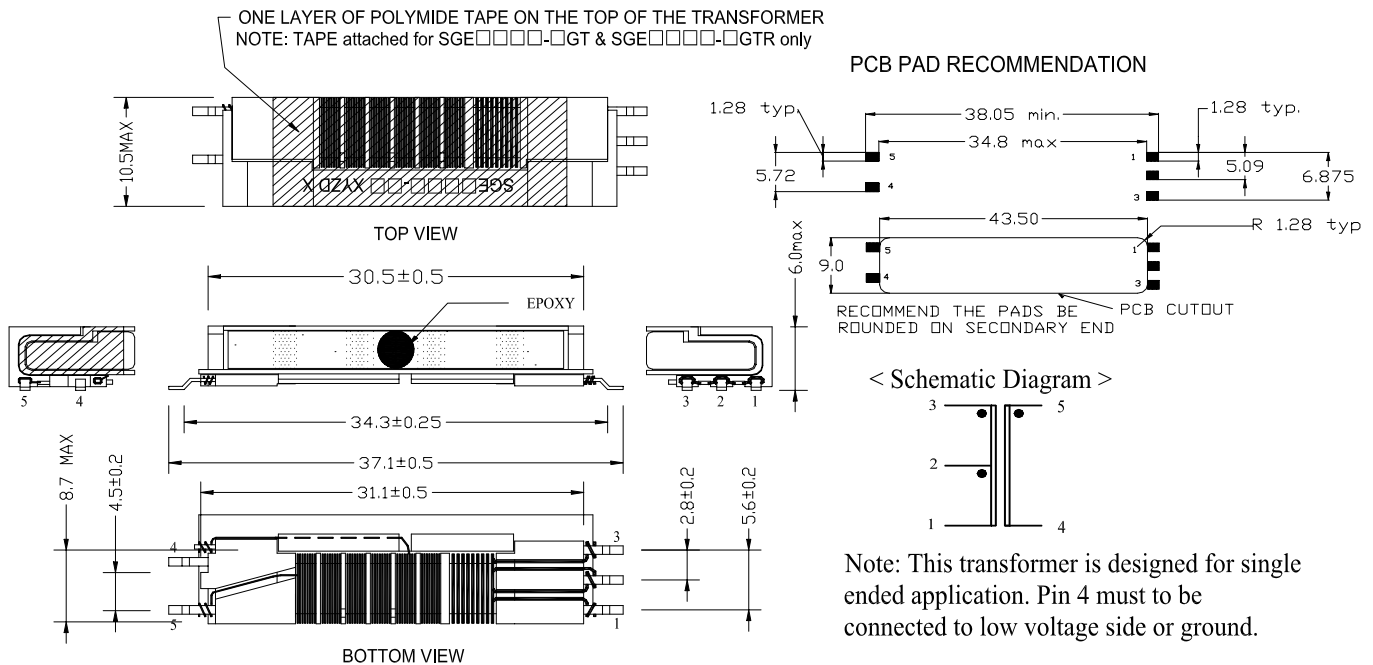
ELECTRICAL CHARACTERISTICS

| Items | Inductance (@ 10KHz, 0.1V) | | | Items | DC. Resistance | | |
|--|------------------------------|-----|-----|--|------------------------------------|------|------|
| | Min | Nom | Max | | Min | Nom | Max |
| L _{L1-2} , L _{L2-3} (μH) | 31 | 36 | 42 | R _{DC1-2} , R _{DC2-3} (mΩ) | 51 | 52.3 | 53.5 |
| L _{L4-5} (mH) | 700 | 790 | 945 | R _{DC4-5} (Ω) | 273 | 284 | 295 |
| L _{LKG1-2} , L _{LKG2-3} (μH) | Inductance (@ 100KHz, 1V) | | | R _{DC1-2} / R _{DC2-3} | 0.96 | 1 | 1.04 |
| | 4.4 | 4.5 | 4.6 | | | | |
| L _{LKG4-5} (mH) | NA | NA | NA | Secondary Self Capacitance (HP4192A 1MHz C meter, 30mVrms) | | | |
| | | | | C _{4.5} (pF) | 2.0 | 2.5 | 3.0 |
| Rating | | | | Dielectric Voltage Withstand | | | |
| Note: Max output power varies depend on operating condition. | | | | 60Hz, Arc-detect enabled, 5 sec. min. 200μA max. leakage current | | | |
| Max Open Output Voltage | 2000V _{RMS} , 3sec. | | | Secondary to Core | 2500V _{RMS} min. (60sec) | | |
| Max Output Voltage | 1100V _{RMS} | | | Primary to Core | 1000V _{RMS} min. | | |
| Max Output Power | 6W | | | Primary to Secondary | 1000V _{RMS} min. | | |

WINDING SPECIFICATIONS

| | Primary | | Secondary |
|------------------|-------------------------------|-------------------------------|-------------------------------|
| | Pin 1 – 2 | Pin 2 – 3 | Pin 4 – 5 |
| Winding Sequence | 2S – 1F | 3S – 2F | 5S – 4F |
| Wire Size & Type | #29, Single Insulation, 180°C | #29, Single Insulation, 180°C | #45, Triple Insulation, 180°C |
| Number of Turns | 10 | 10 | 1500 |
| Winding Method | Bifilar | | |

PHYSICAL SPECIFICATIONS & WIRING DIAGRAM



PART MARKING

SGE□□□□-□G XYZD A – SGE2645-1G: MSC PN, XYZ: Datecode (X:YR, YZ=WK), D: Plant Code, A: Rev.#

PACKAGING SPEC AND ORDER INFORMATION

Packaging Order Information – SGE2645-1G (Standard for TRAY)
 SGE2645-1GTR (Tape and Reel)
 SGE2645-1GT (with Polyimide Tape for TRAY)

TAPE & REEL : Refer to SGE2604-4 specification



Microsemi[®]

Specification Number
SGE2645-1G
Revision. A (082905)

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NOTES

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