

4W LMT2110 42.1:1 Transformer

DESCRIPTION

This document describes and specifies the electrical and mechanical characteristics of the SGE2689-1G high voltage transformer for CCFL inverter power supplies. SGE2689-1G is the RoHS compliant and Lead free transformer. For Reliability and Safety Specification, refer to SGE2606-3.

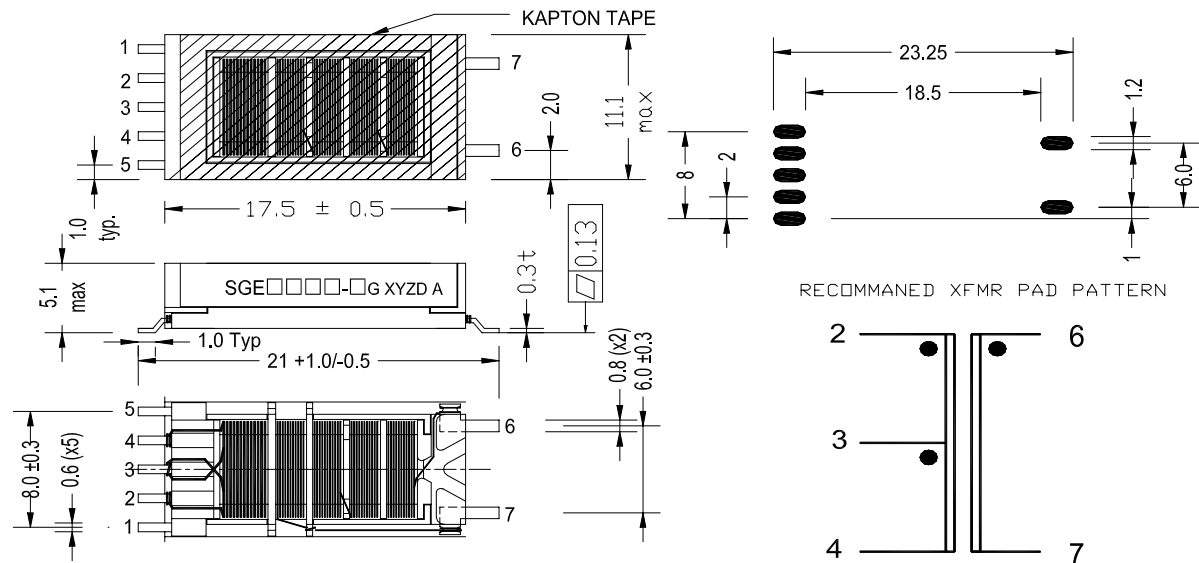
ELECTRICAL CHARACTERISTICS

| Items | Inductance (@ 10KHz, 0.1V) | | | Items | DC. Resistance | | |
|--|------------------------------|------|------|--|------------------------------------|-----|------|
| | Min | Nom | Max | | Min | Nom | Max |
| L2-3, L3-4 (μH) | 157 | 185 | 214 | R _{DC} 2-3, R _{DC} 3-4(mΩ) | 200 | 215 | 230 |
| L6-7 (mH) | 1024 | 1213 | 1396 | R _{DC} 6-7 (Ω) | 350 | 361 | 390 |
| L _{LKG} 2-3, L _{LKG} 3-4 (μH) | Inductance (@ 100KHz, 1V) | | | R _{DC} 2-3 / R _{DC} 3-4 | 0.96 | 1 | 1.04 |
| | 10 | 11 | 12 | Secondary Self Capacitance (HP4192A 1MHz C meter, 30mVrms) | | | |
| L _{LKG} 6-7 (mH) | NA | NA | NA | C ₆₋₇ (pF) | 2.0 | 2.5 | 3.5 |
| 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 | 1500V _{RMS} , 3sec. | | | Secondary to Core | 2000V _{RMS} min. (60sec) | | |
| Max Output Voltage | 1000V _{RMS} | | | Primary to Core | 1000V _{RMS} min. | | |
| Max Output Power | 4W | | | Primary to Secondary | 1000V _{RMS} min. | | |

WINDING SPECIFICATIONS

| | Primary | | Secondary |
|------------------|-------------------------------|-------------------------------|-------------------------------|
| | Pin 2 – 3 | Pin 3 – 4 | Pin 6 – 7 |
| Winding Sequence | 2S – 3F | 3S – 4F | 6S – 7F |
| Wire Size & Type | #33, Single Insulation, 180°C | #33, Single Insulation, 180°C | #46, Triple Insulation, 180°C |
| Number of Turns | 19 | 19 | 1600 |
| Winding Method | Bifilar | | |

PHYSICAL SPECIFICATIONS & WIRING DIAGRAM



Note : This Transformer is designed for single ended application. Pin 7 must be connected to low voltage side or ground.

PART MARKING

SGE□□□□-□G XYZD A – SGE2689-1G: MSC PN, XYZ: Datecode (X:YR, YZ=WK), D: Plant Code, A: Rev.#

PACKAGING SPEC AND ORDER INFORMATION

Packaging Order Information – SGE2689-1G (Standard for TRAY)

SGE2689-1GTR (Tape and Reel)

TAPE & REEL : Refer to SGE2604-3 specification



Microsemi[®]

Specification Number
SGE2689-1G
Revision. A (090605)

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NOTES

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