

This Document describes and specifies the electrical and mechanical characteristics of SGE2681-1 high voltage transformer for CCFL inverter power supply. This component should be designed and manufactured in accordance with Engineering Specification LES2110T

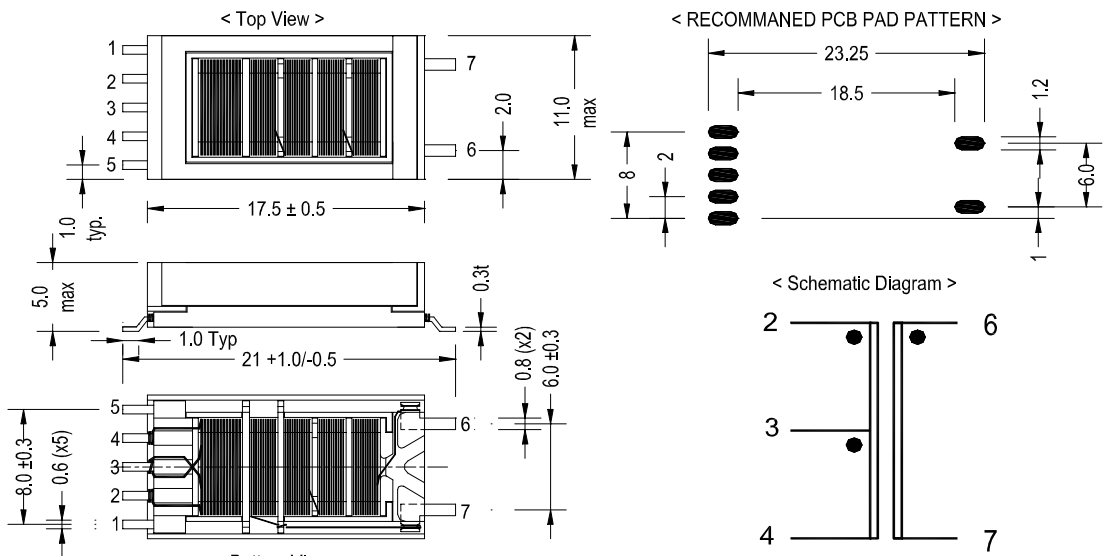
**1. Electrical Characteristics**

| Items   | Inductance ( at 10Khz, 0.1V)  |      |      | Items   | D.C Resistance |     |      |
|---|---|------|------|---|----------------|-----|------|
|   | Min   | Nom  | Max  |   | Min            | Nom | Max  |
| L2-3, L3-4 (uH)                                   | 211   | 249  | 287  | R2-3,R3-4(mΩ)   | 242            | 249 | 255  |
| L6-7 (mH)   | 1030  | 1213 | 1396 | Rdc6-7(Ω)   | 362            | 371 | 380  |
| L <sub>LKG2-4</sub> , L <sub>LKG4-6</sub><br>(uH) | Inductance ( at 100Khz, 1Vrms)  |      |      | R2-3/R3-4   | 0.96           | 1   | 1.04 |
|   | 12.7  | 14   | 15.3 | Balance of Primary DC resistance will be used as Bifilar winding measure tool |                |     |      |
| Should be shorted pin 6-7                         |   |      |      |   |                |     |      |
| <b>Secondary Self Capacitance</b>                 |   |      |      |   |                |     |      |
| C4-5 (pF)   | 2.0   | 2.5  | 3.0  | HP4280A 1Mhz C meter, Floating mode   |                |     |      |
| <b>Dielectric Voltage Withstand</b>               |   |      |      |   |                |     |      |
| Secondary to Core                                 | 60 Hz.,Arc-detect enabled, 5 sec. min., 200uA max. leakage current  |      |      | 2000Vrms min. ( 1min. 60Hz)   |                |     |      |
| Primary to Core                                   |   |      |      | 1000Vrms min.   |                |     |      |
| Primary to Secondary                              |   |      |      | 1000Vrms min.   |                |     |      |
| <b>Operating Test</b>                             |   |      |      |   |                |     |      |
| V6-7  | Primary driven with 80 kHz. sine wave source (pin 2-4), secondary measured with Tektronix P6015 (or equiv.).. |      |      | 1500Vrms min.   |                |     |      |

**2. 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<br>130°C | #33, Single Insulation<br>130°C | #46, Triple insulation<br>130°C |
| Number of Turns  | 22                              | 22                              | 1600                            |
| Winding Method   | Bifilar                         |                                 |                                 |

**3. Physical Specification & Wiring Diagram**



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