

This Document describes and specifies the electrical and mechanical characteristics of SGE2641-1 high voltage transformer for CCFL inverter power supply. This component should be designed and manufactured in accordance with Engineering Specification LES3811T

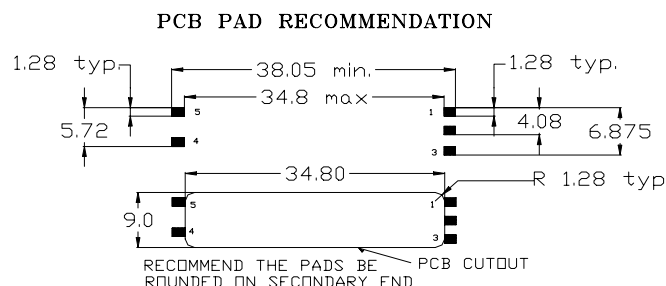
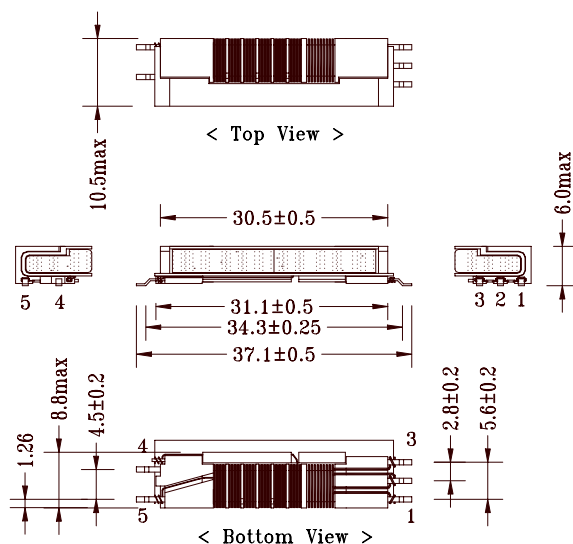
## 1. Electrical Characteristics

| Items                                            |     | Inductance ( at 10Khz, 0.1V)   |                                                                                                               |      | Items                                                                         | D.C Resistance |     |      |
|--------------------------------------------------|-----|--------------------------------|---------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------|----------------|-----|------|
|                                                  |     | Min                            | Nom                                                                                                           | Max  |                                                                               | Min            | Nom | Max  |
| L1-2, L2-3 (uH)                                  |     | 100                            | 117                                                                                                           | 136  | R1-2,R2-3(mΩ)                                                                 | 150            | 174 | 198  |
| L4-5 (mH)                                        |     | 890                            | 1012                                                                                                          | 1210 | Rdc4-5(Ω)                                                                     | 405            | 415 | 430  |
| L <sub>LKG2-4</sub> ,L <sub>LKG4-6</sub><br>(uH) |     | Inductance ( at 100Khz, 1Vrms) |                                                                                                               |      | R1-2/R2-3                                                                     | 0.96           | 1   | 1.04 |
|                                                  |     | 10                             | 11                                                                                                            | 12   | Balance of Primary DC resistance will be used as Bifilar winding measure tool |                |     |      |
| Should be shorted pin 4-5                        |     |                                |                                                                                                               |      |                                                                               |                |     |      |
| Secondary Self Capacitance                       |     |                                |                                                                                                               |      | HP4280A 1Mhz C meter, Floating mode                                           |                |     |      |
| C4-5 (pF)                                        | 2.0 | 2.5                            | 3.0                                                                                                           |      |                                                                               |                |     |      |
| Dielectric Voltage Withstand                     |     |                                |                                                                                                               |      |                                                                               |                |     |      |
| Secondary to Core                                |     |                                | 60 Hz.,Arc-detect enabled, 5 sec. min., 200uA max. leakage current                                            |      | 2500Vrms min. ( 1min. 60Hz)                                                   |                |     |      |
| Primary to Core                                  |     |                                |                                                                                                               |      | 1000Vrms min.                                                                 |                |     |      |
| Primary to Secondary                             |     |                                |                                                                                                               |      | 1000Vrms min.                                                                 |                |     |      |
| Operating Test                                   |     |                                |                                                                                                               |      |                                                                               |                |     |      |
| V4-5                                             |     |                                | Primary driven with 60 kHz. sine wave source (pin 1-3), secondary measured with Tektronix P6015 (or equiv.).. |      | 2000Vrms min.                                                                 |                |     |      |

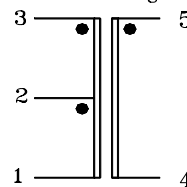
## 2. Winding Specifications

|                  | Primary                         |                                 | Secondary                     |
|------------------|---------------------------------|---------------------------------|-------------------------------|
|                  | Pin 1 – 2                       | Pin 2-3                         | Pin 4-5                       |
| Winding Sequence | 2S-1F                           | 3S-2F                           | 5S-4F                         |
| Wire Size & Type | #35*2, Single Insulation, 180°C | #35*2, Single Insulation, 180°C | #46, Triple insulation, 180°C |
| Number of Turns  | 18                              | 18                              | 1700                          |
| Winding Method   | Bifilar                         |                                 |                               |

## 3. Physical Specification & Wiring Diagram



< Schematic Diagram >



Note : This transformer is design for single ended application. Pin 4 must to be connected to low voltage side or ground.