

This Document describes and specifies the electrical and mechanical characteristics of SGE2675-1 high voltage transformer. This component should be designed and manufactured in accordance with Engineering Specification LES2608T-01

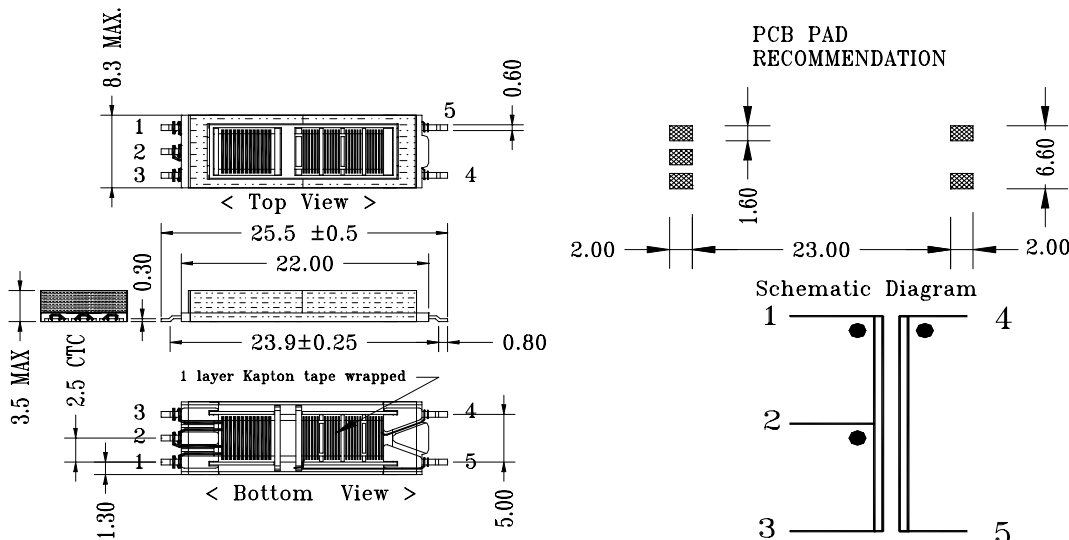
### 1. Electrical Characteristics

| Items                                     | Inductance ( at 10Khz, 0.1V)   |   |      | Items                                   | D.C Resistance |     |     |
|---|--------------------------------|---|------|---|----------------|-----|-----|
|   | Min                            | Nom   | Max  |   | Min            | Nom | Max |
| L1-2 (uH)                                 | 60                             | 85  | 112  | Rdc1-2(mΩ)                              |                | 198 |     |
| L2-3 (uH)                                 | 60                             | 85  | 112  | Rdc2-3(mΩ)                              |                | 198 |     |
| L4-5 (mH)                                 |                                | 428   |      | Rdc4-5(Ω)                               |                | 493 | 570 |
| L <sub>LKG1-2</sub> , L <sub>LKG2-3</sub> | Inductance ( at 100Khz, 1Vrms) |   |      | Should be shorted pin 4-5<br>Bifilaring |                |     |     |
|   | 18                             | 19  | 20   |   |                |     |     |
| L <sub>LKG1-2</sub> / L <sub>LKG2-3</sub> | 0.96                           | 1   | 1.04 |   |                |     |     |
| <b>Secondary Self Capacitance</b>         |                                |   |      | HP4280A 1Mhz C meter, Floating mode     |                |     |     |
| C4-5(pF)                                  | 1.9                            | 2.2   | 3    |   |                |     |     |
| <b>Dielectric Voltage Withstand</b>       |                                |   |      |   |                |     |     |
| Secondary to Core                         |                                | 60 Hz.,Arc-detect enabled, 5 sec. min., 200uA max. leakage current  |      | 1500Vrms min. ( 1min. 60Hz)             |                |     |     |
| Primary to Core                           |                                |   |      | 750Vrms min.                            |                |     |     |
| Primary to Secondary                      |                                |   |      | 750Vrms min.                            |                |     |     |
| <b>Operating Test</b>                     |                                |   |      |   |                |     |     |
| V4-5                                      |                                | Primary driven with 80 kHz. sine wave source (pin 1-3), secondary measured with Tektronix P6015 (or equiv.).. |      | 1200Vrms min.                           |                |     |     |

### 2. Winding Specifications

|                  | Primary                         |                                 | Secondary                       |
|------------------|---------------------------------|---------------------------------|---------------------------------|
|                  | Pin 1 – 2                       | Pin 2-3                         | Pin 4-5                         |
| Winding Sequence | 1S-2F                           | 2S-3F                           | 4S-5F                           |
| Wire Size & Type | 0.18φ, Single Insulation, 130°C | 0.18φ, Single Insulation, 130°C | 0.03φ, Triple insulation, 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 5 must to be connected to low voltage side or ground.