



## ■ Features

- Ultra slim
- Universal AC input / Full range
- 2 pole EURO plug
- No load power consumption <0.075W
- **Energy efficiency Level VI**
- Comply with EU ErP and meet CoC version 5
- Class II power (without earth pin)
- Protections: Short circuit / Overload / Over voltage
- Fully enclosed plastic case
- Pass LPS
- 3 years warranty

## ■ Applications

- Consumer electronic devices
- Telecommunication devices
- Office facilities
- Industrial equipments

## ■ Description

SGA25E is a 25W ultra slim wall-mounted style single-output green adaptor series, which is compact and convenient for carry. SGA25E is a class II power unit (without FG) equipped with the standard 2-Pole European plug, accepting the input range from 90VAC to 264VAC. The whole series provides different models with output voltages ranging between 5VDC and 48VDC that it can satisfy the demands for various types of consumer electronic devices.

With the efficiency up to 88% and the extremely low no-load power consumption below 0.075W, SGA25E is compliant with EU ErP and meet CoC version 5. The supreme feature allows the adaptor to save the energy when it is under either the operating mode or the standby mode. The entire series is approved for international safety regulations; moreover, it adopts the 94V-0 flame retardant plastic case that it can effectively prevent users from electric hazards.

## ■ Model Encoding

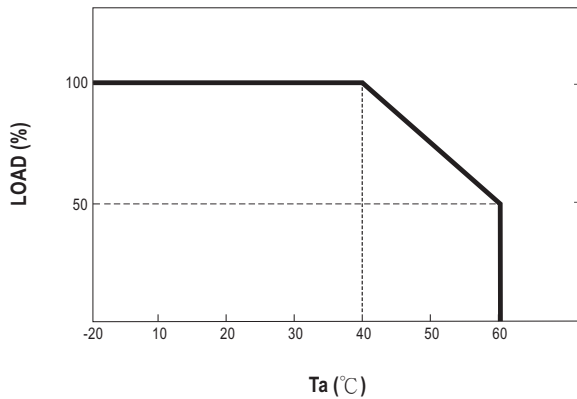
**SGA 25 E 05 -P1J**

- Series name
- Output wattage
- European 2 pin AC plug
- Output voltage
- DC plug type
  - P1J: Plug for standard model, 2.1  $\psi$   $\times$  5.5  $\psi$   $\times$  11mm, C+ tuning fork type
  - Optional plug type available per request

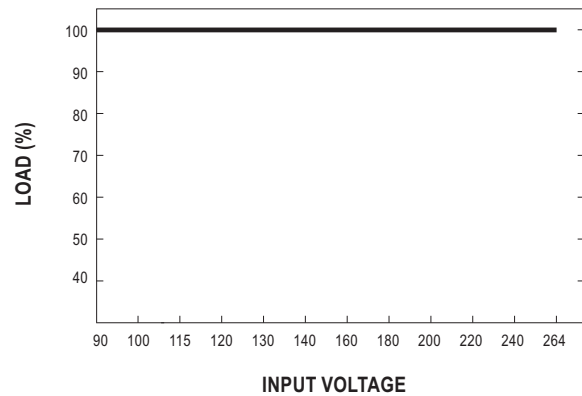
**SPECIFICATION**

| ORDER NO.                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | SGA25E05-P1J                                                                           | SGA25E07-P1J | SGA25E09-P1J | SGA25E12-P1J | SGA25E15-P1J | SGA25E18-P1J | SGA25E24-P1J                  | SGA25E48-P1J |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|-------------------------------|--------------|
| OUTPUT                    | SAFETY MODEL NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SGA25E05                                                                               | SGA25E07     | SGA25E09     | SGA25E12     | SGA25E15     | SGA25E18     | SGA25E24                      | SGA25E48     |
|                           | DC VOLTAGE <span>Note.2</span>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5V                                                                                     | 7.5V         | 9V           | 12V          | 15V          | 18V          | 24V                           | 48V          |
|                           | RATED CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4A                                                                                     | 2.93A        | 2.77A        | 2.08A        | 1.66A        | 1.38A        | 1.04A                         | 0.52A        |
|                           | CURRENT RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0 ~ 4A                                                                                 | 0 ~ 2.93A    | 0 ~ 2.77A    | 0 ~ 2.08A    | 0 ~ 1.66A    | 0 ~ 1.38A    | 0 ~ 1.04A                     | 0 ~ 0.52A    |
|                           | RATED POWER (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 20W                                                                                    | 22W          | 25W          | 25W          | 25W          | 25W          | 25W                           | 25W          |
|                           | RIPPLE & NOISE (max.) <span>Note.3</span>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 80mVp-p                                                                                | 80mVp-p      | 80mVp-p      | 80mVp-p      | 80mVp-p      | 80mVp-p      | 80mVp-p                       | 120mVp-p     |
|                           | VOLTAGE TOLERANCE <span>Note.4</span>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ± 5.0%                                                                                 | ± 5.0%       | ± 5.0%       | ± 3.0%       | ± 3.0%       | ± 3.0%       | ± 2.0%                        | ± 2.0%       |
|                           | LINE REGULATION <span>Note.5</span>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ± 1.0%                                                                                 | ± 1.0%       | ± 1.0%       | ± 1.0%       | ± 1.0%       | ± 1.0%       | ± 1.0%                        | ± 1.0%       |
|                           | LOAD REGULATION <span>Note.6</span>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ± 5.0%                                                                                 | ± 5.0%       | ± 5.0%       | ± 3.0%       | ± 3.0%       | ± 3.0%       | ± 2.0%                        | ± 2.0%       |
| SETUP, RISE, HOLD UP TIME |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 300ms, 60ms, 18ms/230VAC      300ms, 60ms, 18ms/115VAC at full load                    |              |              |              |              |              |                               |              |
| INPUT                     | VOLTAGE RANGE <span>Note.7</span>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 90 ~ 264VAC                                                                            |              |              |              |              |              |                               |              |
|                           | FREQUENCY RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 47 ~ 63Hz                                                                              |              |              |              |              |              |                               |              |
|                           | EFFICIENCY (Typ.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 82.5%                                                                                  | 85.5%        | 86.5%        | 87%          | 87%          | 87.5%        | 87.5%                         | 89%          |
|                           | AC CURRENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.65A / 115VAC      0.25A / 230VAC                                                     |              |              |              |              |              |                               |              |
|                           | INRUSH CURRENT (max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 40A / 115VAC      60A / 230VAC                                                         |              |              |              |              |              |                               |              |
|                           | LEAKAGE CURRENT(max.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.25mA / 240VAC                                                                        |              |              |              |              |              |                               |              |
| PROTECTION                | OVERLOAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 120 ~ 180% rated output power                                                          |              |              |              |              |              | 150 ~ 250% rated output power |              |
|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Protection type : Hiccup mode, recovers automatically after fault condition is removed |              |              |              |              |              |                               |              |
|                           | OVER VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 110 ~ 140% rated output voltage                                                        |              |              |              |              |              |                               |              |
|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Protection type : Clamp by zener diode, output short                                   |              |              |              |              |              |                               |              |
| ENVIRONMENT               | WORKING TEMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -20 ~ +60℃ (Refer to "Derating Curve")                                                 |              |              |              |              |              |                               |              |
|                           | WORKING HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 20% ~ 90% RH non-condensing                                                            |              |              |              |              |              |                               |              |
|                           | STORAGE TEMP., HUMIDITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | -20 ~ +85℃, 10 ~ 95% RH                                                                |              |              |              |              |              |                               |              |
|                           | TEMP. COEFFICIENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ± 0.03% / °C (0 ~ 40℃)                                                                 |              |              |              |              |              |                               |              |
|                           | VIBRATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes                |              |              |              |              |              |                               |              |
| SAFETY & EMC<br>(Note. 8) | SAFETY STANDARDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | TUV EN60950-1 approved                                                                 |              |              |              |              |              |                               |              |
|                           | WITHSTAND VOLTAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | I/P-O/P:4242VDC                                                                        |              |              |              |              |              |                               |              |
|                           | ISOLATION RESISTANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | I/P-O/P:100M Ohms / 500VDC / 25℃ / 70% RH                                              |              |              |              |              |              |                               |              |
|                           | EMC EMISSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Compliance to EN55022 class B, EN61000-3-2,3                                           |              |              |              |              |              |                               |              |
|                           | EMC IMMUNITY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Compliance to EN61000-4,-2,3,4,5,6,8,11, light industry level, criteria A              |              |              |              |              |              |                               |              |
| OTHERS                    | LIFE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 3 years : 100% load 40℃, 8hours / day                                                  |              |              |              |              |              |                               |              |
|                           | MTBF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 450Khrs min. MIL-HDBK-217F(25℃)                                                        |              |              |              |              |              |                               |              |
|                           | DIMENSION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 75.5*32*47.5mm (L*W*H)                                                                 |              |              |              |              |              |                               |              |
|                           | PACKING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 158g ; 60pcs / 10.5kg / CARTON                                                         |              |              |              |              |              |                               |              |
| CONNECTOR                 | PLUG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | See page 3 ; Other type available by customer requested                                |              |              |              |              |              |                               |              |
|                           | CABLE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | See page 3 ; Other type available by customer requested                                |              |              |              |              |              |                               |              |
| NOTE                      | 1.All parameters are specified at 230VAC input, rated load, 25℃ 70% RH ambient.<br>2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.<br>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.<br>4.Tolerance: includes set up tolerance, line regulation, load regulation.<br>5.Line regulation is measured from low line to high line at rated load.<br>6.Load regulation is measured from 10% to 100% rated load<br>7.Derating may be needed under low input voltages. Please check the static characteristics for more details.<br>8.The power supply is considered as an independent unit, but the final equipment still need to re-confirm that the whole system complies with the EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies."<br>(as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> ) |                                                                                        |              |              |              |              |              |                               |              |

### Derating Curve

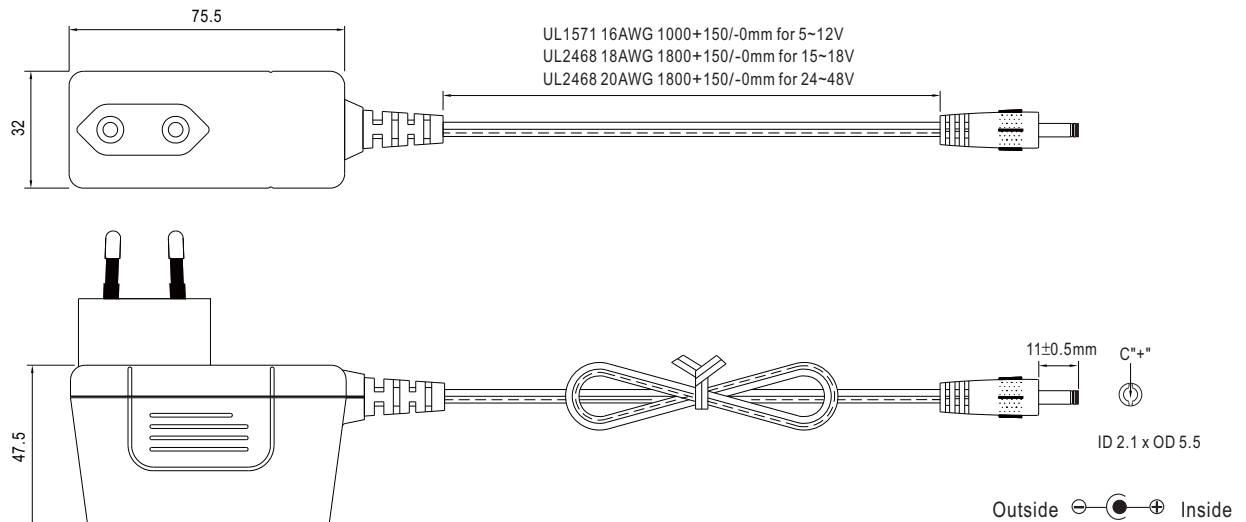


### Static Characteristics



### Mechanical Specification

Unit:mm



### Plug Assignment

Standard plug: P1J

| P1J    |        |
|--------|--------|
| P/N    | OUTPUT |
| CENTER | +      |

### Installation Manual

Please refer to : <http://www.meanwell.com/webnet/search/InstallationSearch.html>