

SPU25C SERIES

25W Desk Top Switching Power Supplies For I.T.E.

Description:

The SPU25C series of AC/DC switching mode power supplies provide 25 Watts of continuous output power and is well-suited for a variety of applications. All supplies are UL 94V-1 min compliant. All model meet FCC Part-15 class B and CISPR-22 class B emission Limits and are designed to comply with UL/c-UL(UL 60950-1:2ndEdition), TUV/GS(EN 60950-1:2ndEdition) and new CE requirements. All units are 100% burned-in and tested.



Features:

- Wide Operating Voltage 90 to 264 VAC, 47 to 63 Hz
- IEC-320-C6 Input Inlet
- Optional Output Connector (See appendix)
- Single Output
- CEC & Energy Star compliance
- Class I
- Approved as Limited Power Source (LPS).
- 2 year warranty

Safety Approvals:



Electrical Characteristics:

| Sym. | Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|-------|--------------------------------------|--|------------------|------|------|------|
| Vin | Safety Approvals Input Voltage Range | | 100 | | 240 | VAC |
| | Operate Voltage Range | | 90 | | 264 | VAC |
| fin | Input Frequency | | 47 | | 63 | Hz |
| Po | Output Power Range | Vin=90 to 264VAC | 0 | | 25 | W |
| Vo | Output Voltage Range | | See rating chart | | | V |
| Io | Output Current Range | | See rating chart | | | A |
| Iil | Input Current (Low Line) | Io=Full load, Vin=115VAC | | | 0.55 | A |
| Iih | Input Current (High Line) | Io=Full load, Vin=230VAC | | | 0.3 | A |
| Irl | Low Line Inrush Current | Io=Full load, 25°C, Cool start, Vin=115VAC | | 20 | 25 | A |
| Irh | High Line Inrush Current | Io=Full load, 25°C, Cool start, Vin=230VAC | | 43 | 50 | A |
| Eff | Efficiency | Io=Full Load, Vin=230VAC | 75 | 85 | 95 | % |
| REG-i | Line Regulation | Io=Full Load | | 0.5 | 1 | % |
| REG-o | Load Regulation | Vin=230VAC | 1 | 3 | 5 | % |
| OVP | Over Voltage Protection | | Nil | | | % |
| OCP | Over Current Protection | | 110 | | 150 | % |
| Ttr | Time of Transient Response | Io=Full Load to Half Load, Vin=100VAC | | | 4 | mS |
| Thold | Hold-Up Time | Io=Full Load, Vin=110VAC | 12 | 14 | 16 | mS |
| Ts | Start Up Time | Io=Full Load, Vin=100VAC | | 0.25 | 0.5 | S |
| Vp-p | Ripple & Noise (Peak to Peak) | Full Load, Vin=90VAC | | 0.5 | 1 | % |
| Ilk | Safety Ground Leakage Current | Io=Full Load, Vin=240VAC | | 0.5 | 0.75 | mA |
| TC | Temperature Coefficient | All output | -0.04 | | 0.04 | %/°C |
| Pno | No-Load Power Consumption | No load, Vin=240VAC | 0 | 0.4 | 0.5 | W |

Environmental :

| Sym. | Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|-------|---|-----------------|------|------|------|------|
| Toper | Operating Temperature | | 0 | 40 | 70 | °C |
| Tstg | Storage Temperature | | -40 | | 85 | °C |
| Ho | Operating Humidity | | 0 | | 95 | % |
| Hr | Storage Humidity | | 0 | | 75 | % |
| MTBF | Operating Temperature at 25°C, Calculated per MIL-HDBK-217F | | 0.3M | | | Hrs |
| Pd | Derate linearly from 100% load at 40°C to 50% load at 70°C | | | | | |

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Safety Specifications:

| Sym. | Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|-------|--|----------------------|------|------|------|-------|
| Vps | Dielectric Withstanding Voltage for Primary to secondary | Primary to secondary | 4242 | | | VDC |
| Vpg | Dielectric Withstanding Voltage for Primary to Ground | Primary to ground | 2121 | | | VDC |
| Ris | Isolation Resistance | Test Voltage=500VDC | 50 | | | M Ω |
| CISPR | EMI requirements for CISPR-22 | Vin=220VAC | B | | | CLASS |
| FCC | EMI requirements for FCC PART-15 | Vin=110VAC | B | | | CLASS |

Output Voltage And Current Rating Chart (Single Output) :

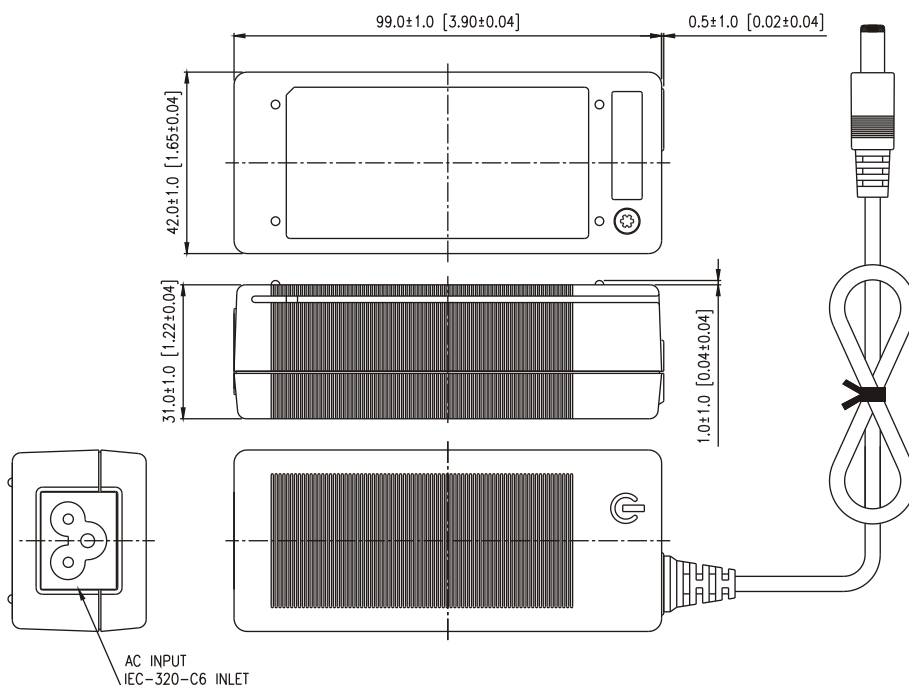
| Model Number | Output Voltage | Output Current | Total Regulation | Maximum Output Power |
|--------------|----------------|----------------|------------------|----------------------|
| SPU25C-102 | 5 ~ 6 VDC | 3.00 ~ 2.75 A | 5% | 16.5W |
| SPU25C-103 | 6 ~ 8 VDC | 3.30 ~ 2.50 A | 5% | 20W |
| SPU25C-104 | 8 ~ 11 VDC | 2.75 ~ 2.00 A | 5% | 22W |
| SPU25C-105 | 11 ~ 13 VDC | 2.27 ~ 1.92 A | 5% | 25W |
| * SPU25C-106 | 13 ~ 16 VDC | 1.92 ~ 1.56 A | 5% | 25W |
| * SPU25C-107 | 16 ~ 21 VDC | 1.56 ~ 1.19 A | 5% | 25W |
| * SPU25C-108 | 21 ~ 27 VDC | 1.19 ~ 0.92 A | 3% | 25W |
| * SPU25C-109 | 27 ~ 33 VDC | 0.92 ~ 0.75 A | 3% | 25W |
| SPU25C-110 | 33 ~ 40 VDC | 0.75 ~ 0.62 A | 3% | 25W |
| SPU25C-111 | 40 ~ 48 VDC | 0.62 ~ 0.52 A | 3% | 25W |

Mark " * " means approved by PSE.

SPU25C-102~104 had been approved by CEC level IV.

SPU25C-105~111 had been approved by CEC level V.

Mechanical Specifications :



Note:

1. Dimensions are shown in mm.
2. Weight: 170gs approx.
3. Optional output connector: See page Appendix.