

SUU180 SERIES

180W U-bracket Switching Power Supplies For I.T.E.

Description:

The SUU180 series of compact, open frame constructed, AC/DC switching mode power supplies provide 180 Watts of continuous output power. They are suited for use in based systems, portable equipments and many other applications. All models 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) ,TUV/Bauart(EN 60950-1) and new CE requirements. All units are 100% burned in and tested.



Features:

- Wide Input Voltage 100 to 240 VAC,47 to 63 Hz
- Internal EMI filter
- Single Output
- Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal
- Output connector mates with Molex housing09-50-3081 and Molex 2478 series crimp terminal
- Output Voltage Available 12,24,48 VDC
- Input Surge Current and Over Load protection
- Over Voltage Protection (Crowbar Design)
- Active Power Factor Correction
- Class I
- Synchronous Rectification
- 2 year warranty

Safety Approvals :



Electrical Characteristics:

| Sym. | Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|-------|-------------------------------|---|------------------|------|------|------|
| Vin | Input Voltage | Operating Voltage | 100 | | 240 | VAC |
| fin | Input Frequency | | 47 | | 63 | Hz |
| PF | Power Factor Correction | Io=Full load, Vin=100~240VAC | 0.95 | 0.97 | 1.0 | |
| Po | Output Power Range | Vin=100 to 240 VAC | 0 | | 180 | 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 | | | 2.3 | A |
| Iih | Input Current (High Line) | Io=Full load, Vin=230VAC | | | 0.9 | A |
| Irl | Low Line Inrush Current | Io=Full load, 25°C,Cool start, Vin=115VAC | | 48 | 54 | A |
| Irh | High Line Inrush Current | Io=Full load, 25°C,Cool start, Vin=230VAC | | 100 | 108 | A |
| Eff | Efficiency | Io=Full load, Vin=230VAC | 85 | 88 | 90 | % |
| REG-i | Line Regulation | Io=Full load | | 0.5 | 1 | % |
| REG-o | Load Regulation | Vin=230VAC | | 3 | 5 | % |
| OVP | Over Voltage Protection | | 112 | | 132 | % |
| 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 | 16 | | | mS |
| Ts | Start Up Time | Io=Full load, Vin=100VAC | 0.3 | 1 | 2 | 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 |

Environmental :

| Sym. | Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|-------|---|-----------------|------|------|------|------|
| Toper | Operating Temperature | | 0 | | 70 | °C |
| Tstg | Storage Temperature | | -40 | | 85 | °C |
| Hr | Relative Humidity | | 5 | | 95 | % |
| MTBF | Operating Temperature at 25°C, Calculated per MIL-HDBK-217F | | 0.1M | | | Hrs |
| Pd | Derate linearly from 100% load at 50°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 | | | MΩ |
| 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 |
|--------------|----------------|----------------|------------------|----------------------|
| * SUU180-105 | 12 VDC | 14.58A | 5% | 175W |
| SUU180-108 | 24 VDC | 7.50 A | 3% | 180W |
| SUU180-111 | 48 VDC | 3.75 A | 2% | 180W |

* *: 12V models are required to use DINKLE#DT-2N-B01W-04.

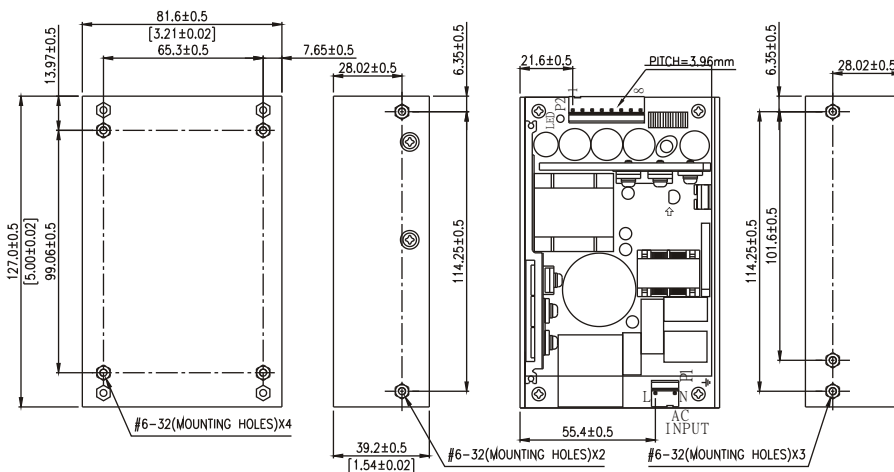
PIN CHART

| PIN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|
| MODEL | RTN | RTN | RTN | RTN | OUT | OUT | OUT | OUT |
| SUU180-1XX | RTN | RTN | RTN | RTN | OUT | OUT | OUT | OUT |

Note:

1. Dimensions are shown in mm .
2. Weight: 521gs approx.
3. Input connector mates with Molex housing 09-50-3031 and Molex 2478 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3081 and Molex 2478 series crimp terminal.

Mechanical Specifications :



(SUU180-105 ONLY)

12V models are required to use screw terminal

