



■ Features :

- Universal AC input / Full range
- 3 pole AC inlet IEC320-C14
- Class I power (with earth pin)
- Full output 3~48V safety approval
- Protections: Short circuit/ Over load/ Over voltage/ Over temp.
- Fix switching frequency and regulation
- LED indicator for power on
- Fully enclosed plastic case
- Topology: Top switch circuit
- Approvals: UL/ CUL/ TUV/ CB/ CE
- 2 years warranty

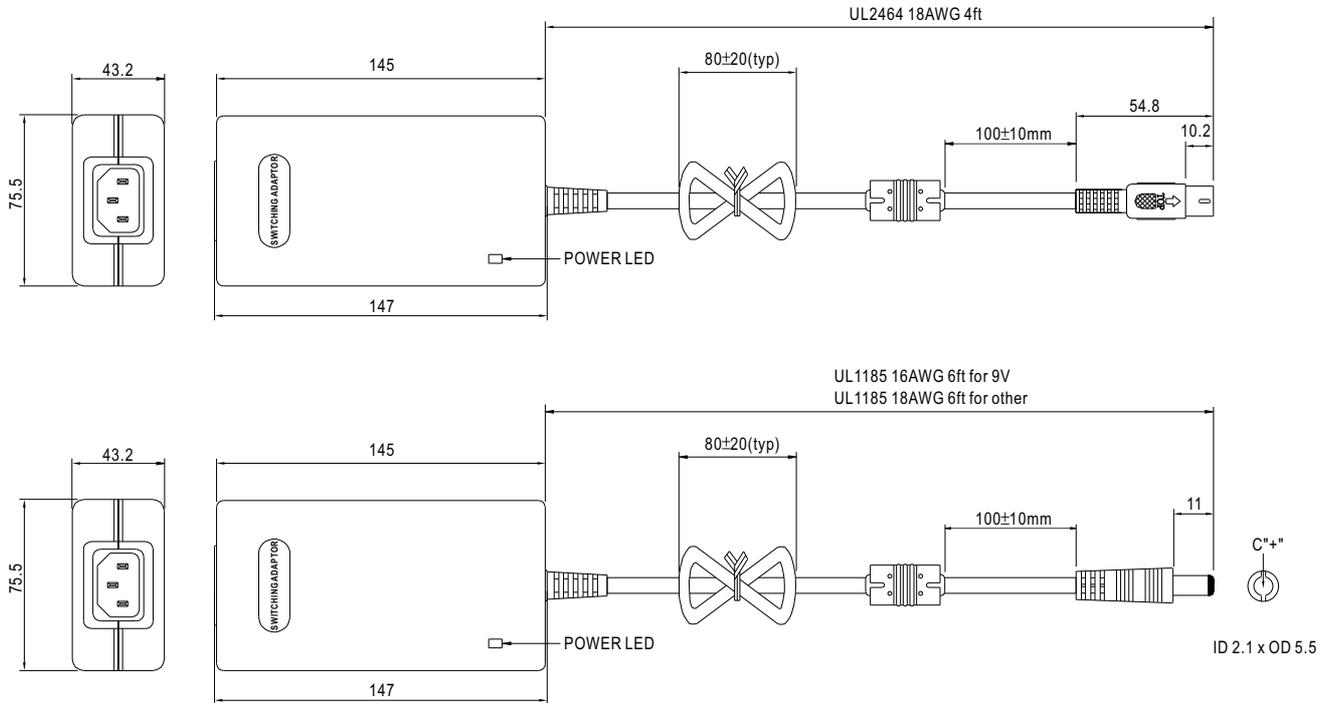


SPECIFICATION

| ORDER NO. | MES50A-0R1B | MES50A-1R1B | MES50A-11R1B | MES50A-2P1J | MES50A-3P1J | MES50A-4P1J | MES50A-5P1J | MES50A-6P1J | MES50A-8P1J | | |
|---------------------------------------|--|--|--------------|-------------|-------------|-------------|-------------------------------|-------------|-------------|-----------|--|
| OUTPUT | SAFETY MODEL NO. | MES50A-0 | MES50A-1 | MES50A-1-1 | MES50A-2 | MES50A-3 | MES50A-4 | MES50A-5 | MES50A-6 | MES50A-8 | |
| | DC VOLTAGE <small>Note.2</small> | 3.3V | 5V | 7.5V | 9V | 12V | 15V | 18V | 24V | 48V | |
| | RATED CURRENT | 7.5A | 7.5A | 5.33A | 5.0A | 4.16A | 3.33A | 2.77A | 2.08A | 1.04A | |
| | CURRENT RANGE | 0 ~ 7.5A | 0 ~ 7.5A | 0 ~ 5.33A | 0 ~ 5.0A | 0 ~ 4.16A | 0 ~ 3.33A | 0 ~ 2.77A | 0 ~ 2.08A | 0 ~ 1.04A | |
| | RATED POWER | 24.75W | 37.5W | 40W | 45W | 50W | 50W | 50W | 50W | 50W | |
| | RIPPLE & NOISE (max.) <small>Note.3</small> | 50mVp-p | 50mVp-p | 75mVp-p | 90mVp-p | 100mVp-p | 100mVp-p | 150mVp-p | 150mVp-p | 200mVp-p | |
| | VOLTAGE ADJ. RANGE | Fixed | | | | | | | | | |
| | VOLTAGE TOLERANCE <small>Note.4</small> | ±8.0% | ±6.0% | ±5.0% | ±5.0% | ±3.0% | ±3.0% | ±3.0% | ±2.0% | ±2.0% | |
| | LINE REGULATION <small>Note.5</small> | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | |
| | LOAD REGULATION <small>Note.6</small> | ±8.0% | ±6.0% | ±5.0% | ±5.0% | ±3.0% | ±3.0% | ±3.0% | ±2.0% | ±2.0% | |
| SETUP, RISE, HOLD TIME | 300ms, 50ms, 16ms at full load | | | | | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC 135~370VDC | | | | | | | | | |
| | FREQUENCY RANGE | 47~63Hz | | | | | | | | | |
| | EFFICIENCY (Typ.) | 60% | 67% | 70% | 72% | 74% | 75% | 78% | 78% | 80% | |
| | AC CURRENT | 1.5A / 100VAC | | | | | | | | | |
| | INRUSH CURRENT (max.) | 90A / 230VAC | | | | | | | | | |
| | LEAKAGE CURRENT (max.) | 0.5mA / 240VAC | | | | | | | | | |
| PROTECTION | OVER LOAD | 112 ~ 250% rated output power | | | | | 150 ~ 350% rated output power | | | | |
| | | Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | | |
| | OVER VOLTAGE | 110 ~ 150% rated output voltage | | | | | | | | | |
| | Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | | | |
| OVER TEMPERATURE | Tj 135°C typically (IC1) detect on main control IC | | | | | | | | | | |
| | Protection type : Shut down o/p voltage, recovers automatically after temperature goes down | | | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | 0 ~ +65°C (Refer to output load derating curve) | | | | | | | | | |
| | WORKING HUMIDITY | 20% ~ 90% RH non-condensing | | | | | | | | | |
| | STORAGE TEMP., HUMIDITY | -20 ~ +85°C, 10 ~ 95% RH | | | | | | | | | |
| | TEMP. COEFFICIENT | ±0.03% / °C (0 ~ 50°C) | | | | | | | | | |
| | VIBRATION | 10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes | | | | | | | | | |
| SAFETY & EMC <small>(Note. 7)</small> | SAFETY STANDARDS | UL2601-1, IEC60601-1, EN60601-1 Approved | | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P: 5656VDC, I/P-FG: 2828VDC | | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P, I/P-FG: 100M Ohms / 500VDC | | | | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55011(CISPR11) class B | | | | | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,3 | | | | | | | | | |
| | EMS IMMUNITY | Compliance to EN60601-1-2 (EN61000-4-2,3,4,5,6,8,11) Light industry level, criteria A | | | | | | | | | |
| OTHERS | MTBF | ----- | | | | | | | | | |
| | DIMENSION | 147*75.5*43.2mm (L*W*H) | | | | | | | | | |
| | PACKING | 0.55Kg ; 36pcs / 21Kg / CARTON | | | | | | | | | |
| CONNECTOR | PLUG | See page 2, Other type available by customer requested | | | | | | | | | |
| | CABLE | See page 2, Other type available by customer requested | | | | | | | | | |
| NOTE | <p>1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH. Ambient.</p> <p>2.DC voltage: The output voltage set at point measure by plug terminal & 50% load.</p> <p>3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor.</p> <p>4.Tolerance: includes set up tolerance, line regulation, load regulation.</p> <p>5.Line regulation is measured from low line to high line at rated load.</p> <p>6.Load regulation is measured from 0% to 100% rated load.</p> <p>7.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.</p> | | | | | | | | | | |

Mechanical Specification

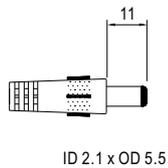
Unit:mm



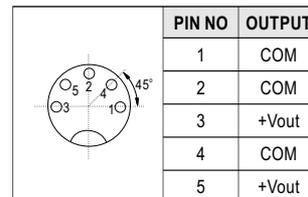
Plug Assignment

Standard plug: Others P1J (option)

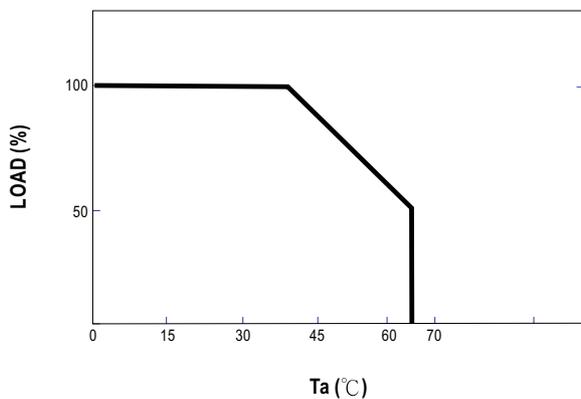
| P1J | |
|--------|--------|
| P/N | OUTPUT |
| CENTER | + |



Standard plug: 3.3V,5V,7.5V R1B (option)



Derating Curve



Static Characteristics

