



- Features :
 - 3 pole AC inlet IEC320-C14
 - Class I power (with earth pin)
 - Protections: Short circuit / Overload / Over voltage
 - Fully enclosed plastic case
 - Fix switching frequency and regulation
 - Topology: PWM 3882 circuit
 - LED indicator for power on
 - Approvals: UL / CUL / TUV / CB / CE
 - 1 year warranty



SPECIFICATION

| ORDER NO. | P50A13-R1B | | P50A14-R1B | | P50A16-R1B | | |
|---------------------------------------|---|---|------------|------------|------------|------------|------------|
| OUTPUT | SAFETY MODEL NO. | PSU50A-13 | | PSU50A-14 | | PSU50A-16 | |
| | DC VOLTAGE <small>Note.2</small> | 5V | 12V | 5V | 15V | 5V | 24V |
| | RATED CURRENT | 4A | 2A | 4A | 1.8A | 4A | 1A |
| | CURRENT RANGE | 0.5 ~ 4.0A | 0.1 ~ 2.0A | 0.5 ~ 4.0A | 0.1 ~ 1.8A | 0.5 ~ 4.0A | 0.1 ~ 1.0A |
| | RATED POWER | 44W | | 47W | | 49W | |
| | RIPPLE & NOISE (max.) <small>Note.3</small> | 50mVp-p | 100mVp-p | 50mVp-p | 100mVp-p | 50mVp-p | 100mVp-p |
| | VOLTAGE ADJ. RANGE | Fixed | | | | | |
| | VOLTAGE TOLERANCE <small>Note.4</small> | ±6.0% | ±10% | ±6.0% | ±10% | ±6.0% | ±10% |
| | LINE REGULATION <small>Note.5</small> | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% | ±1.0% |
| | LOAD REGULATION <small>Note.6</small> | ±5.0% | ±9.0% | ±5.0% | ±9.0% | ±5.0% | ±9.0% |
| SETUP, RISE, HOLD UP TIME | 1.5s, 50ms, 12ms at full load | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC 135 ~ 370VDC | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | |
| | EFFICIENCY (Typ.) | 70% | | 74% | | 75% | |
| | AC CURRENT | 1.6A / 100VAC | | | | | |
| | INRUSH CURRENT (max.) | 40A / 230VAC | | | | | |
| | LEAKAGE CURRENT(max.) | 0.75mA / 240VAC | | | | | |
| PROTECTION | OVERLOAD | 150 ~ 250% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | |
| | OVER VOLTAGE | 5V: 110 ~ 140% of rated output voltage Protection type : Shut down o/p voltage, re-power on to recover | | | | | |
| ENVIRONMENT | WORKING TEMP. | 0 ~ +40°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 | UL1950, CSA22.2, EN60950-1 approved | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC , I/P-FG:1.5KVAC | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P,I/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022(CISPR22) class B | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,3 | | | | | |
| | EMS IMMUNITY | Compliance to EN61000-4-2,3,4,5,6,11, ENV50204, light industry level, criteria A | | | | | |
| OTHERS | MTBF | 280K hrs min. MIL-HDBK-217F (25°C) | | | | | |
| | DIMENSION | 147*76*43mm (L*W*H) | | | | | |
| | PACKING | 0.55kg; 36pcs / 21kg / CARTON | | | | | |
| CONNECTOR | PLUG | Standard type R1B: DIN 5PIN for stock ; Other type available by customer requested | | | | | |
| | CABLE | Standard type AWM2464 18Awg*4c with shield 4ft for stock ; Other type available by customer requested | | | | | |
| NOTE | 1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient. 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 4.Tolerance: includes set up tolerance, line regulation, load regulation. 5.Line regulation is measured from low line to high line at rated load. 6.Load regulation is measured from 20% to 100% rated load. 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. | | | | | | |

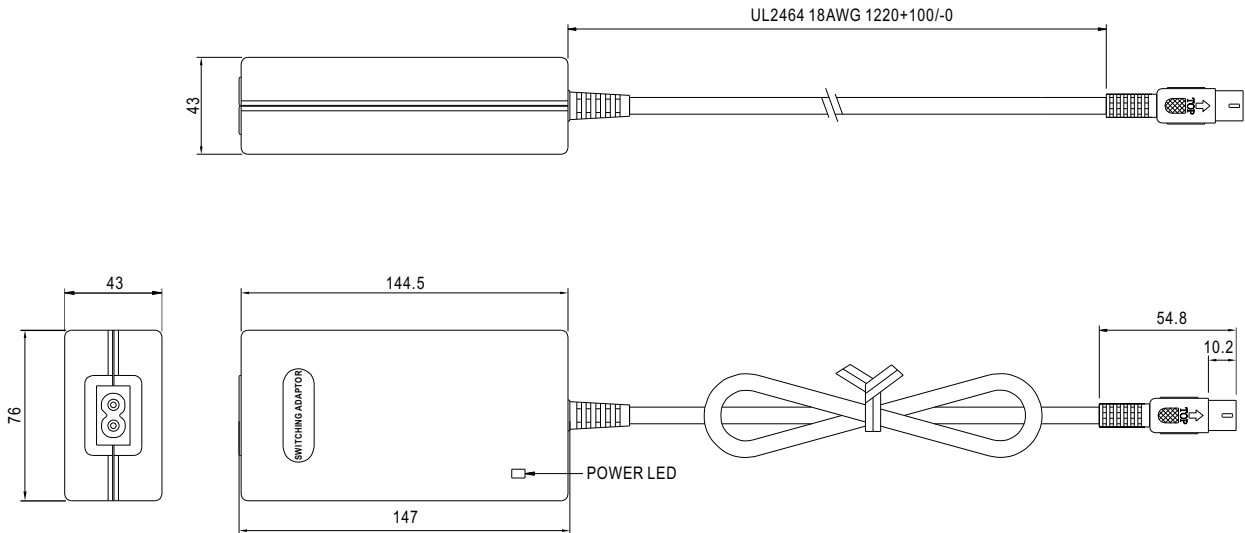
File Name:P50A-D-SPEC 2007-05-14



Note: all features are subject to change without notice.

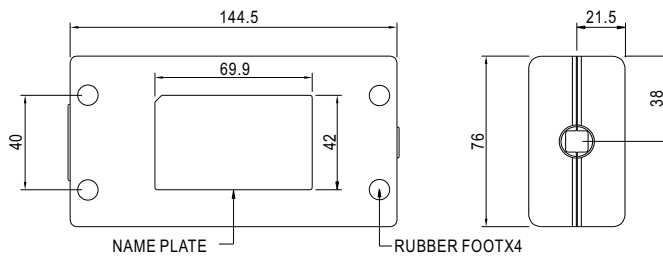
Mechanical Specification

Unit:mm



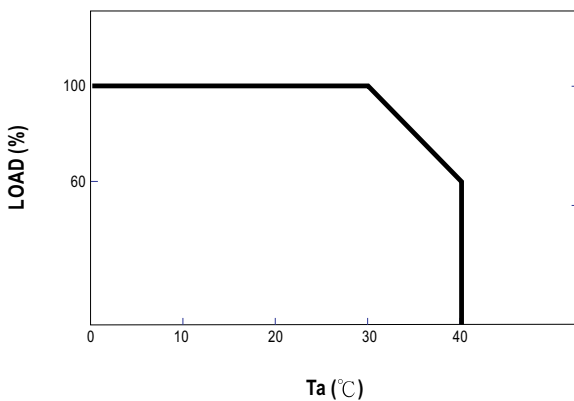
Plug Assignment

Standard plug: R1B (option)

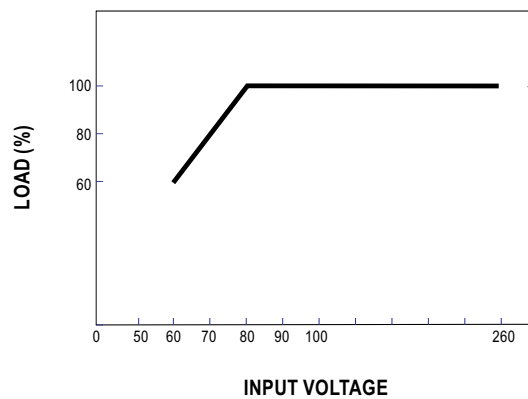


| PIN NO | OUTPUT |
|--------|--------|
| 1 | COM |
| 2 | COM |
| 3 | +5VDC |
| 4 | -Vout |
| 5 | +Vout |

Derating Curve



Static Characteristics





- Features :
- 3 pole AC inlet IEC320-C14
 - Class I power (with earth pin)
 - Protections: Short circuit / Overload / Over voltage
 - Fully enclosed plastic case
 - Fix switching frequency and regulation
 - Topology: PWM 3882 circuit
 - LED indicator for power on
 - Approvals: UL / CUL / TUV / CB / CE
 - 1 year warranty

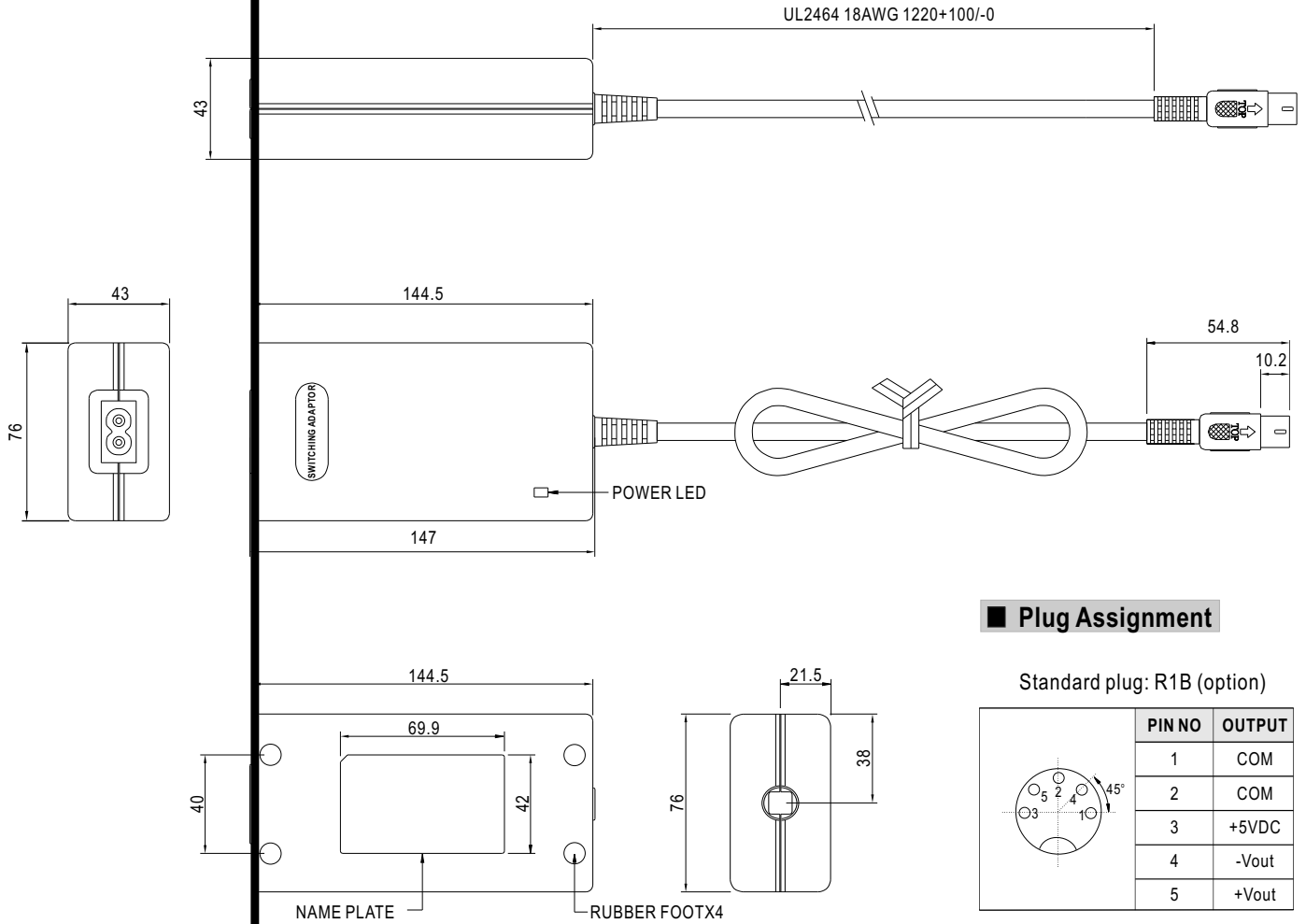


SPECIFICATION

| ORDER NO. | P50A13A-R1B | | | P50A13D-R1B | | | P50A14E-R1B | | | |
|---------------------------------------|--|---|------------|-------------|------------|------------|-------------|------------|------------|------------|
| OUTPUT | SAFETY MODEL NO. | PSU50A-13A | | | PSU50A-13D | | | PSU50A-14E | | |
| | DC VOLTAGE <small>Note.2</small> | 5V | 12V | -5V | 5V | 12V | -12V | 5V | 15V | -15V |
| | RATED CURRENT | 4A | 2A | 0.5A | 4A | 2A | 0.5A | 4A | 1.5A | 0.5A |
| | CURRENT RANGE | 0.5 ~ 4.0A | 0.5 ~ 2.0A | 0.1 ~ 0.5A | 0.5 ~ 4.0A | 0.5 ~ 2.0A | 0.1 ~ 0.5A | 0.5 ~ 4.0A | 0.5 ~ 1.5A | 0.1 ~ 0.5A |
| | RATED POWER | 46.5W | | | 50W | | | 50W | | |
| | RIPPLE & NOISE (max.) <small>Note.3</small> | 50mVp-p | 100mVp-p | 100mVp-p | 50mVp-p | 100mVp-p | 100mVp-p | 50mVp-p | 100mVp-p | 100mVp-p |
| | VOLTAGE ADJ. RANGE | Fixed | | | | | | | | |
| | VOLTAGE TOLERANCE <small>Note.4</small> | ±6.0% | ±10% | ±12% | ±6.0% | ±10% | ±12% | ±6.0% | ±10% | ±12% |
| | 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> | ±5.0% | ±10% | ±10% | ±5.0% | ±10% | ±10% | ±5.0% | ±10% | ±10% |
| SETUP, RISE, HOLD UP TIME | 1.5s, 50ms, 12ms at full load | | | | | | | | | |
| INPUT | VOLTAGE RANGE | 90 ~ 264VAC 135~ 370VAC | | | | | | | | |
| | FREQUENCY RANGE | 47 ~ 63Hz | | | | | | | | |
| | EFFICIENCY (Typ.) | 70% | | | 72% | | | 74% | | |
| | AC CURRENT | 1.6A / 100VAC | | | | | | | | |
| | INRUSH CURRENT (max.) | 40A / 230VAC | | | | | | | | |
| LEAKAGE CURRENT (max.) | 0.75mA / 240VAC | | | | | | | | | |
| PROTECTION | OVERLOAD | 150 ~ 250% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed | | | | | | | | |
| | OVER VOLTAGE | 5V: 110 ~ 140% of rated output voltage Protection type : Shut down o/p voltage, re-power on to recover | | | | | | | | |
| ENVIRONMENT | WORKING TEMP. | 0 ~ +40°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 | UL1950, CSA22.2, EN60950-1 approved | | | | | | | | |
| | WITHSTAND VOLTAGE | I/P-O/P:3KVAC , I/P-FG:1.5KVAC | | | | | | | | |
| | ISOLATION RESISTANCE | I/P-O/P,I/P-FG:100M Ohms / 500VDC / 25°C / 70% RH | | | | | | | | |
| | EMI CONDUCTION & RADIATION | Compliance to EN55022(CISPR22) class B | | | | | | | | |
| | HARMONIC CURRENT | Compliance to EN61000-3-2,3 | | | | | | | | |
| OTHERS | EMTBF | 280K hrs min. MIL-HDBK-217F (25°C) | | | | | | | | |
| | DIMENSION | 147*76*43mm (L*W*H) | | | | | | | | |
| | PACKING | 0.55kg; 36pcs / 21kg / CARTON | | | | | | | | |
| CONNECTOR | PLUG | Standard type R1B: DIN 5PIN for stock ; Other type available by customer requested | | | | | | | | |
| | CABLE | Standard type AWM2464 18Awg*4c with shield 4ft for stock ; 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 20% 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

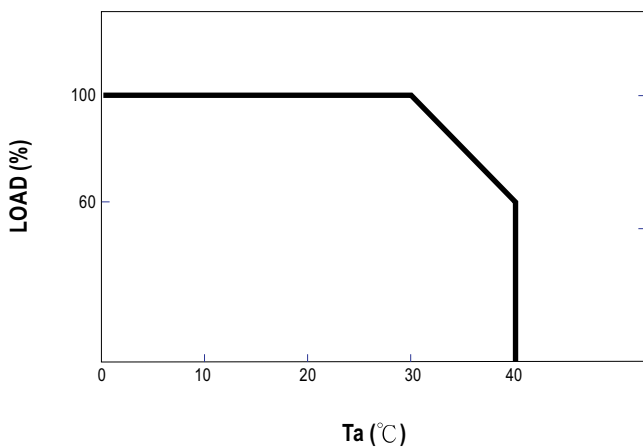


■ Plug Assignment

Standard plug: R1B (option)

| PIN NO | OUTPUT |
|--------|--------|
| 1 | COM |
| 2 | COM |
| 3 | +5VDC |
| 4 | -Vout |
| 5 | +Vout |

■ Derating Curve



■ Static Characteristics

