



16.5~30W AC-DC Single Output and Medical Type Desktop

**MES30B series**



■ Features :

- Universal AC input / Full range
- 2 pole AC inlet IEC320-C8
- Class II power ( without earth pin)
- Full output 3~48V safety approval
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Fully enclosed plastic case
- Medical safety approved (MOPP level)
- Fix switching frequency and regulation
- Topology: Top switch circuit
- LED indicator for power on
- Approvals: UL / CUL / TUV / CB / CE
- 2 years warranty



**SPECIFICATION**

| ORDER NO.                                    | MES30B-0P1J   | MES30B-1P1J  | MES30B-1-1P1J | MES30B-2P1J | MES30B-3P1J | MES30B-4P1J | MES30B-5P1J                 | MES30B-6P1J | MES30B-8P1J |           |  |
|--|---|--|---------------|-------------|-------------|-------------|-----------------------------|-------------|-------------|-----------|--|
| OUTPUT                                       | SAFETY MODEL NO.  | MES30B-0   | MES30B-1      | MES30B-1-1  | MES30B-2    | MES30B-3    | MES30B-4                    | MES30B-5    | MES30B-6    | MES30B-8  |  |
|  | DC VOLTAGE <small>Note.2</small>  | 3.3V   | 5V            | 7.5V        | 9V          | 12V         | 15V                         | 18V         | 24V         | 48V       |  |
|  | RATED CURRENT   | 5A   | 5A            | 3.33A       | 3.33A       | 2.5A        | 2.0A                        | 1.66A       | 1.25A       | 0.62A     |  |
|  | CURRENT RANGE   | 0 ~ 5A   | 0 ~ 5A        | 0 ~ 3.33A   | 0 ~ 3.33A   | 0 ~ 2.5A    | 0 ~ 2.0A                    | 0 ~ 1.66A   | 0 ~ 1.25A   | 0 ~ 0.62A |  |
|  | RATED POWER   | 16.5W  | 25W           | 25W         | 30W         | 30W         | 30W                         | 30W         | 30W         | 30W       |  |
|  | RIPPLE & NOISE (max.) <small>Note.3</small>   | 30mVp-p  | 30mVp-p       | 40mVp-p     | 50mVp-p     | 50mVp-p     | 60mVp-p                     | 70mVp-p     | 80mVp-p     | 100mVp-p  |  |
|  | VOLTAGE ADJ. RANGE  | Fixed  |               |             |             |             |                             |             |             |           |  |
|  | VOLTAGE TOLERANCE <small>Note.4</small>   | ±8.0%  | -5% ~ +8%     | ±4.0%       | ±4.0%       | ±3.0%       | ±2.0%                       | ±2.0%       | ±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%  | -5% ~ +8%     | ±4.0%       | ±4.0%       | ±3.0%       | ±2.0%                       | ±2.0%       | ±2.0%       | ±2.0%     |  |
| SETUP, RISE, HOLD UP TIME                    | 300ms, 50ms, 16ms at full load  |  |               |             |             |             |                             |             |             |           |  |
| INPUT  | VOLTAGE RANGE   | 90 ~ 264VAC 135 ~ 370VDC   |               |             |             |             |                             |             |             |           |  |
|  | FREQUENCY RANGE   | 47 ~ 63Hz  |               |             |             |             |                             |             |             |           |  |
|  | EFFICIENCY (Typ.)   | 56%  | 70%           | 72%         | 74%         | 76%         | 78%                         | 78%         | 80%         | 82%       |  |
|  | AC CURRENT  | 0.8A / 100VAC  |               |             |             |             |                             |             |             |           |  |
|  | INRUSH CURRENT (max.)   | 35A / 230VAC   |               |             |             |             |                             |             |             |           |  |
| LEAKAGE CURRENT (max.) <small>Note.7</small> | Touch current < 80μA/264VAC   |  |               |             |             |             |                             |             |             |           |  |
| PROTECTION                                   | OVERLOAD  | 112 ~ 250% rated output power  |               |             |             |             | 150~350% rated output power |             |             |           |  |
|  |   | Protection type : Hiccup mode, recovers automatically after fault condition is removed   |               |             |             |             |                             |             |             |           |  |
|  | OVER VOLTAGE  | 110 ~ 140% 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 "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. 8)</small>        | SAFETY STANDARDS  | ANSI/AAMI ES60601-1, TUV EN60601-1, IEC60601-1 approved  |               |             |             |             |                             |             |             |           |  |
|  | WITHSTAND VOLTAGE   | I/P-O/P: 5656VDC   |               |             |             |             |                             |             |             |           |  |
|  | ISOLATION RESISTANCE  | I/P-O/P: 100M Ohms / 500VDC / 25°C / 70% RH  |               |             |             |             |                             |             |             |           |  |
|  | EMC EMISSION  | Compliance to EN55011(CISPR11) class B, EN61000-3-2,3  |               |             |             |             |                             |             |             |           |  |
|  | EMC IMMUNITY  | Compliance to EN60601-1-2 (EN61000-4-2,3,4,5,6,8,11), light industry level, criteria A   |               |             |             |             |                             |             |             |           |  |
| OTHERS                                       | MTBF  | 400Khrs min. MIL-HDBK-217F (25°C)  |               |             |             |             |                             |             |             |           |  |
|  | DIMENSION   | 108*67*36mm (L*W*H)  |               |             |             |             |                             |             |             |           |  |
|  | PACKING   | 0.3kg ; 54pcs/ 20kg / CARTON   |               |             |             |             |                             |             |             |           |  |
| CONNECTOR                                    | PLUG  | Standard type P1J: 2.1φ * 5.5φ * 11mm, turning fork type, center positive for stock ; Other type available by customer requested |               |             |             |             |                             |             |             |           |  |
|  | CABLE   | SPT-2 16AWG 4FT for 3.3 ~ 7.5V ; UL1185 18AWG 6FT for 9 ~ 48V  |               |             |             |             |                             |             |             |           |  |
| NOTE   | 1.All parameters are specified at 230VAC input, rated load, 25°C 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 0% to 100% rated load.<br>7.Touch current was measured from primary input to DC output.<br>8.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. |  |               |             |             |             |                             |             |             |           |  |

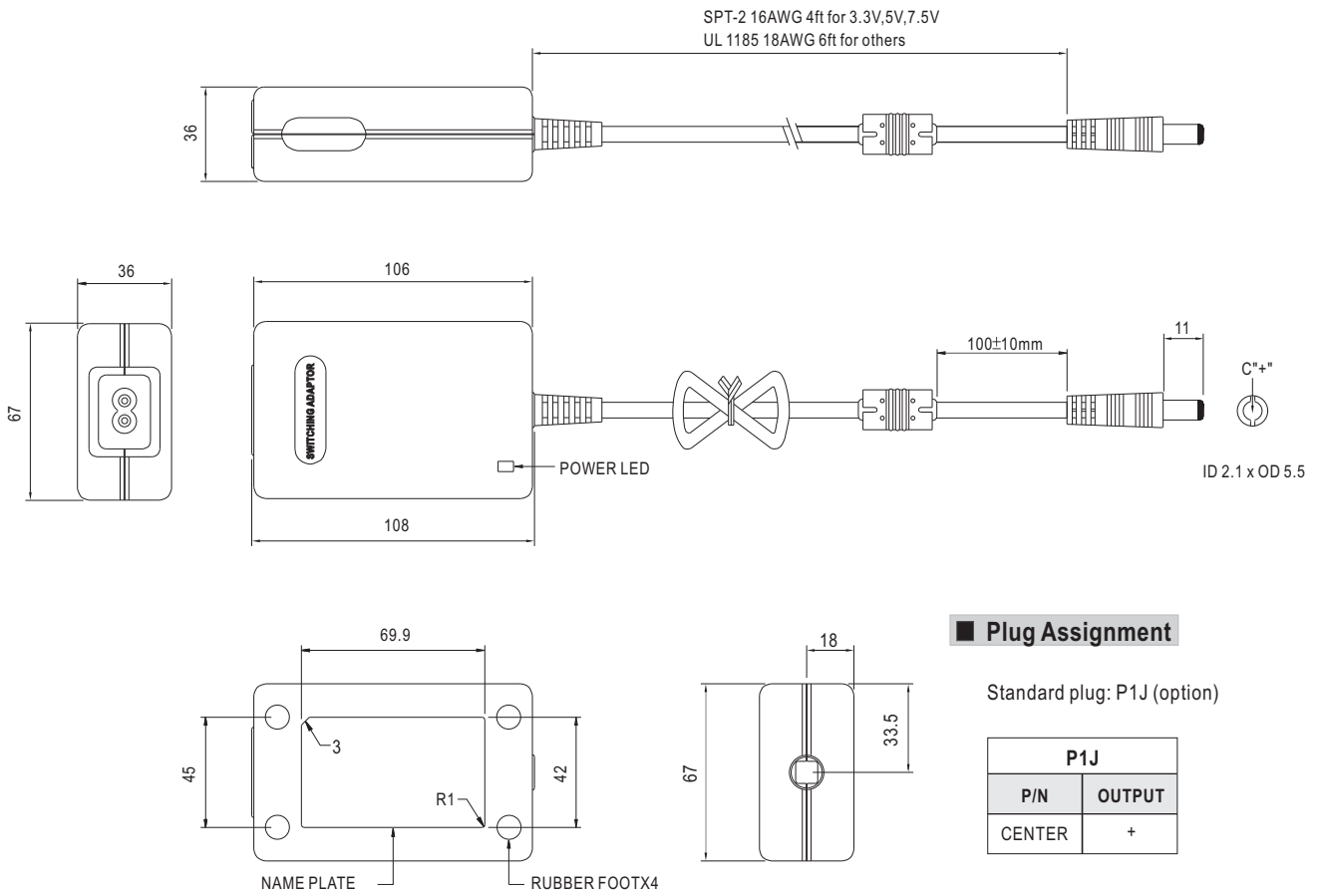


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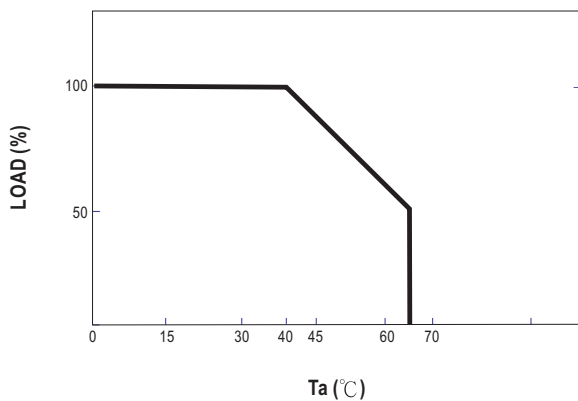
**MES30B series**

■ Mechanical Specification

Unit:mm



■ Derating Curve



■ Static Characteristics

