



BSYB SERIES

15W Wall Mount Switching Power Supplies.

Description:

The **BSYB** series of AC/DC switching mode power supplies provide 15 Watts of continuous output power. All supplies are UL 94V-0 min compliant, include a 2 prong plug-in mains connector for certain applications. All models All models meet FCC class B and are designed to comply with UL/c-UL requirements. All units are 100% burned in and tested.

Features:

- Wide Input Voltage 90 to 264 VAC, 47 to 63 Hz
- 2 Prong Plug-In Mains Connector
- Output Voltage Available From 5VDC Thru 24VDC
- Optional Output Connector (See Sample specification)
- Single Output
- Efficiency level VI
- Class II
- 1 year warranty



Electrical Characteristics:

| Sym . | Param eter | Test Conditions | Min. | Typ. | Max. | Unit | |
|-------|-------------------------------|--|------|------|------|------|---|
| Vin | Input Voltage | Operating Voltage | 90 | | 264 | VAC | |
| fin | Input Frequency | | 47 | | 63 | Hz | |
| Po | Output Power Range | Vin=90 to 264VAC | 0 | | 15 | W | |
| Vo | Output Voltage Range | | 4.5 | | 24 | V | |
| Io | Output Current Range | | 0.01 | | 2.5 | A | |
| Iil | Input Current (Low Line) | Io=Full load, Vin=115VAC | | | 0.4 | 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 | | 12 | 15 | A | |
| Irh | High Line Inrush Current | Io=Full load, 25°C, Cool start, Vin=230VAC | | 16 | 20 | A | |
| Eff | Efficiency | Io=Full Load, Vin=230VAC | 71 | 76 | 85 | % | |
| REG-i | Line Regulation | Io=Full Load | | 0.5 | 1 | % | |
| REG-o | Load Regulation | Vin=230VAC | | 3 | 5 | % | |
| OVP | Over Voltage Protection | | Nil | | | % | |
| OCp | Over Current Protection | Nil But,Output protected to short circuit conditions | | | | | % |
| Ttr | Time of Transient Response | Io=Full Load to Half Load, Vin=100VAC | | | 4 | mS | |
| Thold | Hold-Up Time | Io=Full Load, Vin=100VAC | 5 | 10 | | mS | |
| Ts | Start Up Time | Io=Full Load, Vin=100VAC | | 2 | 3 | S | |
| Vrn | Ripple & Noise(Peak to Peak) | Full Load, Vin=90VAC | | 0.5 | 1 | % | |
| Ilk | Safety Ground Leakage Current | Io=Full Load, Vin=240VAC | | 0.2 | 0.25 | mA | |
| Pno | No-Load Power Consumption | No load,Vin=240VAC | | 0.2 | 0.3 | W | |

Environmental :

| Sym . | Param eter | Test Conditions | Min. | Typ. | Max. | Unit |
|-------|---|-----------------|------|------|------|------|
| Toper | Operating Temperature | | 0 | | 70 | °C |
| Tstg | Storage Temperature | | -40 | | 85 | °C |
| Hr | Relative Humidity | No-Condensing | 5 | | 95 | % |
| MTBF | Operating Temperature at 25°C, Calculated per MIL-HDBK-217F | | 0.1M | | | Hrs |
| Pd | Derate linearly from 100% load at 40°C to 50% load at 70°C | | | | | |



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Safety Specifications:

| Sym . | Param eter | Test Conditions | Min. | Typ. | Max. | Unit |
|-------|--|----------------------|------|------|------|-------|
| Vps | Dielectric Withstanding Voltage for Primary to secondary | Primary to secondary | 4242 | | | VDC |
| 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 Num ber. | Output Voltage | Max. Output Current | Total Regulation | Max. Output Watts |
|----------------|----------------|---------------------|------------------|-------------------|
| BSY10-102 | 5 ~ 6 VDC | 1.60 ~ 1.50 A | 5% | 10W |
| BSY10-103 | 6 ~ 8 VDC | 1.50 ~ 1.25 A | 5% | 10W |
| BSY10-104 | 8 ~ 11 VDC | 1.25 ~ 0.91 A | 5% | 10W |
| BSY10-105 | 11 ~ 13 VDC | 0.91 ~ 0.77 A | 5% | 10W |
| BSY10-106 | 13 ~ 16 VDC | 0.77 ~ 0.63 A | 5% | 10W |
| BSY10-107 | 16 ~ 21 VDC | 0.63 ~ 0.48 A | 3% | 10W |
| BSY10-108 | 21 ~ 27 VDC | 0.48 ~ 0.37 A | 3% | 10W |
| BSY10-109 | 27 ~ 33 VDC | 0.37 ~ 0.30 A | 3% | 10W |
| BSY10-110 | 33 ~ 40 VDC | 0.30 ~ 0.25 A | 3% | 10W |
| BSY10-111 | 40 ~ 48 VDC | 0.25 ~ 0.20 A | 3% | 10W |

① The total regulation on model 102~105 is required to use AWG#20 / 4FT output cable.
The total regulation on model 106~110 is required to use AWG#24 / 4FT output cable.
The regulation and efficiency will be changed by modified output cable.

Note:
1. Dimensions are shown in mm.
2. Weight: 90gs approx.
3. Optional output connector:
See page Appendix.

Mechanical Specifications:

