

## 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					

# BSYB SERIES

## Safety Specifications:

Sym .	Param eter	Test Conditions	Min.	Typ.	Max.	Unit
V <sub>ps</sub>	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:

