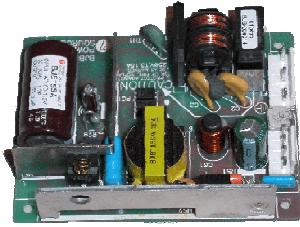




# ETA-USA

## HIGH QUALITY SWITCHING POWER SUPPLIES

**AC/DC SWITCHING POWER SUPPLY**  
**AC INPUT 85~132V**  
**SINGLE CHANNEL OUTPUT**  
**50 WATTS**



## BJB-SA-U SERIES

**DIMENSION: 70Wx93Lx26H**

Application	
Broad needs	
Input	
<b>Input Voltage:</b>	AC100-115V
<b>Input Voltage Range:</b>	AC85~132V (DC 110-175)
<b>Frequency:</b>	50/60Hz
<b>Input Frequency Range:</b>	47-440Hz
<b>Phase:</b>	Single
<b>Inrush Current: *1</b>	30A(Typ.) at AC100V

### General Description

"BJ"-Series AC/DC Switching power supplies low cost and module-type was developed to meet the broad needs by making the dimensions amazingly small. The dimension of this series are about 40%(BJS 10W) and 33%(BJB 50 W) respectively smaller than those of the current products of our company.

### Features

1. Ultra small size
2. Advanced conversion technology, C&K converter adopted (BJB 50W)
3. High efficiency, ex. BJB05SA 85%
4. Low cost
5. Versatile output arrangement(Model 10 type, BJB)
6. BJS-FWA: Isolated type
7. EMI designed to FCC part 15-B Class-B, VCCI Class-B
8. Safety: BJS: UL1950, C-UL(CSA950)  
BJB: UL60950, C-UL(CSA60950)

### Options:

Wire Harness

Output Characteristic	Unit	Models									
		BJB3.3SA-U	BJB05SA-U	BJB06SA-U	BJB09SA-U	BJB12SA-U	BJB15SA-U	BJB24SA-U	BJB30SA-U	BJB36SA-U	BJB48SA-U
Output Voltage	Vdc	3.3	5	6	9	12	15	24	30	36	48
Output Current	A	10	10	8.4	5.6	4.3	3.5	2.2	1.7	1.4	1.1
Voltage Adjust Range	V	+/- 10% of Rated Output Voltage(at no load within the input range)									
Ripple Noise(max)*3	mVpp	180	150	160	180	180	180	180	200	300	400
Rise up time	mS	500mS(maximum)AC115V/200mS(maximum)AC230V at 25°C and rated input/output									
Hold up time	mS	20mS(minimum) at 25°C and rated input/output									
Regulation											
a. Line Regulation	mV	26.4	40	48	72	96	120	192	240	288	384
b. Load Regulation	mV	29.7	45	54	81	108	135	216	270	324	432
c. Temperature Coefficient *4	°C	0.03%/°C									
d. Drift(maximum) *5	mV	31.5	40	45	60	75	90	135	165	195	255
f. Recovery Time	mS	20 [mS] Typ.									

Efficiency *2	%	82	85	85	85	85	85	85	85	85	85
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Conditions:

\*1 at cold start

\*2 at DC130V input and rated output

\*3 measured by a bayonet probe at output connector at a 0 to 100MHz bandwidth

\*4 at 0 to +50°C

\*5 for 7hour period after 1hour warm-up at 25°C and rated input/output



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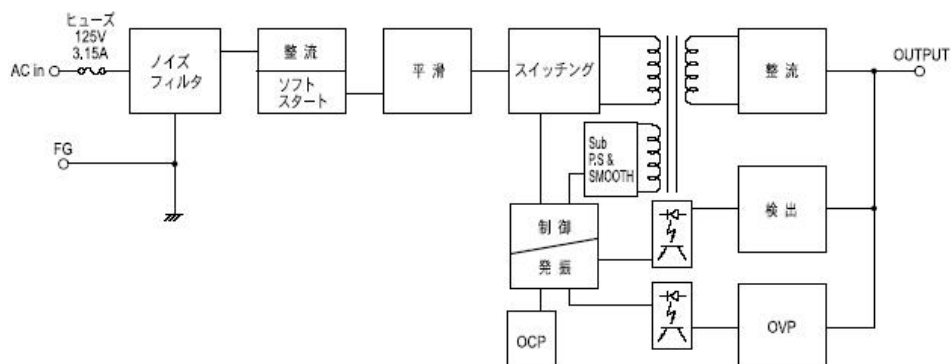


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## HIGH QUALITY SWITCHING POWER SUPPLIES

Environmental Specification	
Operating Temperature	-10 to +50°C
Operating Humidity	20 to 90%RH(non-condensing)
Storage Temperature	-20 to +75°C
Storage Humidity	10 to 90%RH(non-condensing)
Withstanding Voltage	Primary-Secondary AC2,000V for 1minute Primary-Frame Ground AC2,000V for 1minute Secondary-Frame Ground AC500V for 1minute
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation tester
Vibration	5-10Hz:10mm double amplitude, 10-55Hz:19.6m/s <sup>2</sup> , 20minutes' period for 60minutes each along X,Y,Z axes(non-operating)
Shock	196m/s <sup>2</sup>
Cooling	Convection
Environmental Agencies	
Leakage Current	0.75 mA(max.)
Line Conducted Noise	Built to meet FCC Part15-B Class B Built to meet VCCI Class B
Safety	UL : UL60950 C-UL : CSA C22.2 No.60950
MTBF [H]	540000   544000   544000   544000   544000   608000   608000   591000   604000   615000
Switching Frequency[kHz]	93
Function/Protection	
Over current Protection	Hiccup mode/Automatic recovery (≥105% of Rated Output Current[A])
Over voltage Protection	Output shutdown (≥115% of Rated Output Current[A])
Remote Sense	available
Mechanical	
Dimension [mm]	70Wx93Lx26H
Weight	130g

## Block Diagram



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