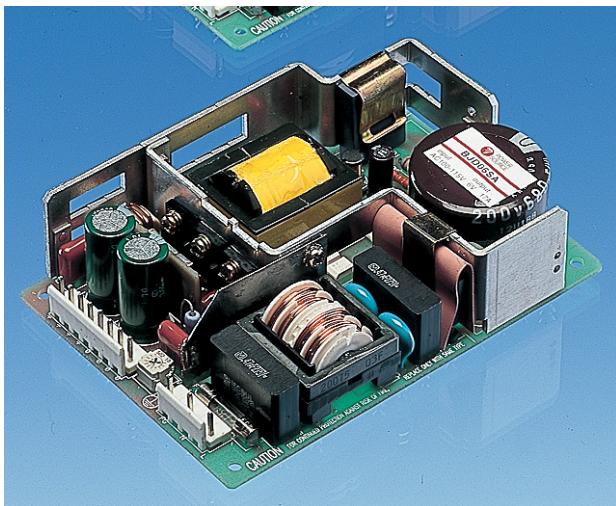


100 WATT AC-DC CONVERTER Single output

BJD-SA Series



General Description

This series of low-cost and module-type switching power supplies was developed to meet the broad needs by making the dimensions amazingly small. These are high efficiency power supplies.

Features

1. Ultra small size, light weight
2. High efficiency, low cost
3. Versatile output arrangement



Options

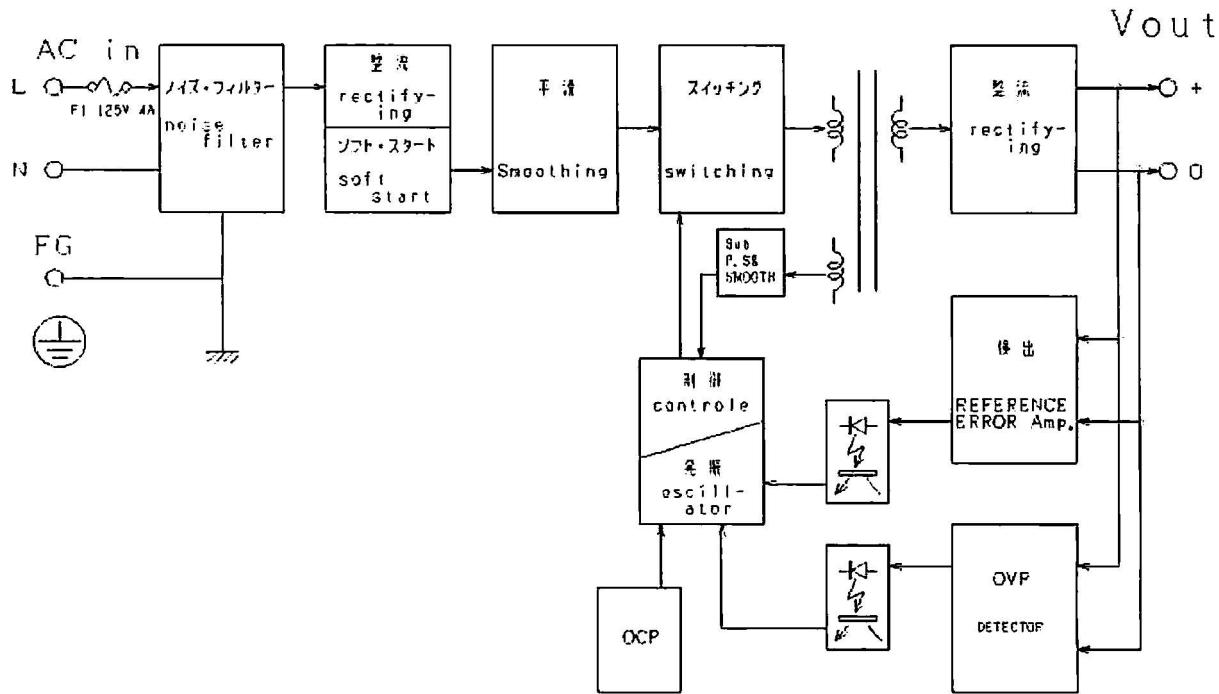
Wire harness set (40cm)

Specifications<AC/DC>		Model							
BJD**SA 100WATTS/SINGLE		BJD3.3SA-U BJD05SA-U BJD06SA-U BJD09SA-U BJD12SA-U BJD15SA-U BJD24SA-U BJD30SA-U BJD36SA-U BJD48SA-U							
Input Characteristic									
Input Voltage		AC100-115V							
Input Range		AC85-132V(DC110-175V)							
Input Frequency		50/60Hz							
Input Frequency Range		47-440Hz							
Phase		Single							
Inrush Current *1		30A(typical) at AC100V							
Efficiency [%] (typical) *2		80	84	84	85	85	85	85	85
Dimension		86W x 120L x 31H							
Weight		340g							

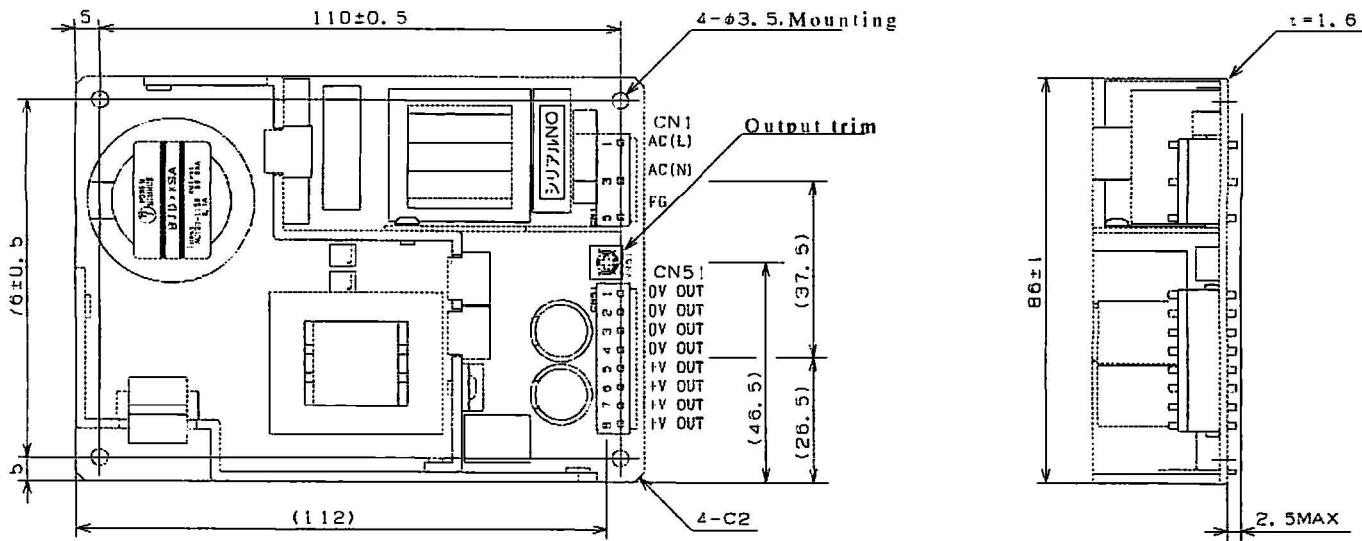
Application	
Industrial	
Input	
Input Voltage:	AC100-115VAC
Input Voltage Range:	AC85-132VAC
Input Current:	2.4A
Frequency:	50/60Hz
Input Frequency Range:	47-440 Hz
Phase:	Single
Inrush Current*1:	30A (typ.) at AC100V,
Leakage Current:	1mA(maximum)at 25°C (rated input/output and rated input frequency)

Specifications<AC/DC>		Model									
BJD**SA 100WATTS/SINGLE		BJD3.3SA-U	BJD05SA-U	BJD06SA-U	BJD09SA-U	BJD12SA-U	BJD15SA-U	BJD24SA-U	BJD30SA-U	BJB36SA-U	BJD48SA-U
Output Voltage [V]	3.3	5	6	9	12	15	24	30	36	48	
Output Current [A]	20	20	17	11	9.0	7.0	4.5	3.5	2.8	2.2	
Voltage Adjust Range	2.7-3.63V		+/- 10% of Rated Output Voltage(at no load within the input range)								
Ripple and Noise [mVp-p](maximum) *3	150	150	160	180	180	180	180	200	300	400	
Regulation											
a.Statistic Line Regulation [mV](maximum)	40	40	48	72	96	120	192	240	288	384	
b.Statistic Load Regulation [mV](maximum)	40	45	54	81	108	135	216	270	324	432	
c.Temperature Coefficient *4	0.03%/C										
d.Drift[mV](maximum) *5	40	35	45	60	75	90	135	165	195	255	
Rise up time	700mS(maximum) at 25C and rated input/output										
Hold up time	20mS(typical) at 25C and rated input/output(>AC100V)										
Functions											
Overcurrent Protection *6	hiccup mode/automatic recovery(on and over 105% of Rated Output Current[A])										
Overvoltage Protection ≥115% of Rated Output Voltage[V]	output shutdown(on and over 115% of Rated Output Voltage[V])										
Remote Sense	not available										
Environmental											
Operating Temperature	-10 to 50C										
Operating Humidity	20 to 85%RH(non-condensing)										
Storage Temperature	-20 to +85C										
Storage Humidity	20 to 85%RH(non-condensing)										
Withstanding Voltage	Primary-Secondary AC2,000V for 1minute at 10mA Primary-Frame Ground AC2,000V for 1minute at 10mA Secondary-Frame Ground AC500V for 1minute at 20mA										
Isolation Resistance	Primary-Secondary-Frame Ground 100MΩ(minimum) by DC500V insulation tester										
Vibration	5-10Hz:10mm double amplitude,10-55Hz:19.6m/s ² ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)										
Shock	196m/s ²										
Cooling	Convection										
Leakage Current *7	0.75mA(maximum)										
Line Conducted Noise	Built to meet FCC Part15-B Class B Built to meet VCCI Class B										
Weight (typical)	300g(board type switcher)										
MTBF [H]	457,000	457,000	455,000	458,000	458,000	546,000	563,000	555,000	557,000	554,000	
Switching Frequency[kHz](typical)	100										

Block Diagram



Outline Drawings



Derating

OCP Curve