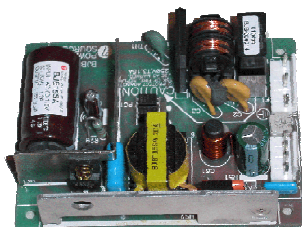




ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

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



BJS-SA-U SERIES

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

Application

Broad needs

Input

Input Voltage: AC100-115V
Input Voltage Range: AC85~132V (DC 110-175)
Frequency: 50/60Hz
Input Frequency Range: 47-440Hz
Phase: Single
Inrush Current: *1 20A (Typ.) at AC100V
Input Current: 0.3A

Output Characteristic		Models				
	Unit	BJS3.3SA-U	BJS05SA-U	BJS12SA-U	BJS15SA-U	BJS24SA-U
Output Voltage	Vdc	3.3	5	12	15	24
Output Current	A	2	2	0.9	0.7	0.45
Voltage Adjust Range	V	Not available				
Ripple Noise(max)*3	mVpp	100	150	220	250	340
Rise up time	mS	200mS(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	40	96	120	192
b. Load Regulation	mV	30	45	108	135	216
c. Dynamic Load Regulation	mV	±150	±150	±360	±450	±720
d. Temperature Coefficient *4	°C	0.03%/°C				
e. Drift(maximum) *5	mV	32				
f. Recovery Time	mS	20 [mS] Typ.				

Efficiency *2	%	71	77	80	81	80
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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



ETA USA

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*4 at 0 to +50°C

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

Environmental Specification	
Operating Temperature	-10 to +71°C (-10 to 50°C at full load condition)
Operating Humidity	20 to 90%RH(non-condensing)
Storage Temperature	-20 to +85°C
Storage Humidity	10 to 85%RH(non-condensing)
Withstanding Voltage	Primary-Secondary AC1,500V for 1minute Primary-Frame Ground AC1,500V 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 ² ,20minutes period for 60minutes each along X,Y,Z axes(non-operating)
Shock	196m/s ²
Cooling	Convection
Environmental Agencies	
Leakage Current	55 uA(typ.) at 25°C
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]	1,200,000
Switching Frequency[kHz]	110kHz at rated input/output (130kHz for BJS3.3SA-U at rated input/output) 90 to 600kHz at input voltage of AC 85 to 132V with a load of 0 to 1,000,025
Function/Protection	
Over current Protection	Current limiting with automatic recovery
Over voltage Protection	Zener diode clamping
Remote Sense	Not available
Mechanical	
Dimension [mm]	40Wx70Lx16H
Weight	30g



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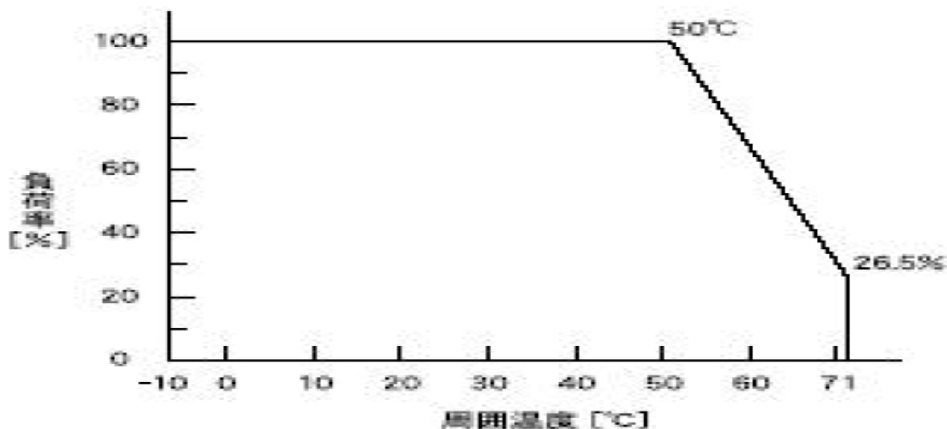
4ヶ所の斜線部は取り付け用金属部の実装可能範囲です。(基板端面より各々7[mm]以内)
又、基板端面から7[mm]以内の条件でAC入力部パターンとのクリアランスは2[mm]以内です。



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HIGH QUALITY SWITCHING POWER SUPPLIES

DERATING CURVE



* 安全規格取得条件につきましては、お問い合わせの上ご確認下さい。



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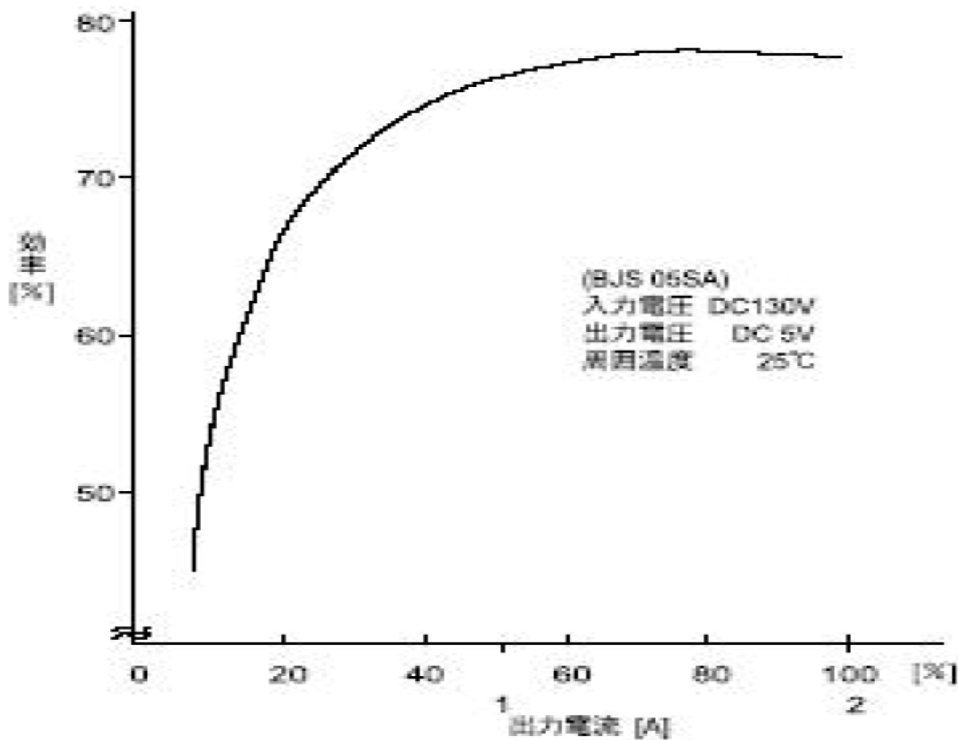
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HIGH QUALITY SWITCHING POWER SUPPLIES

EFFICIENCY CURVE



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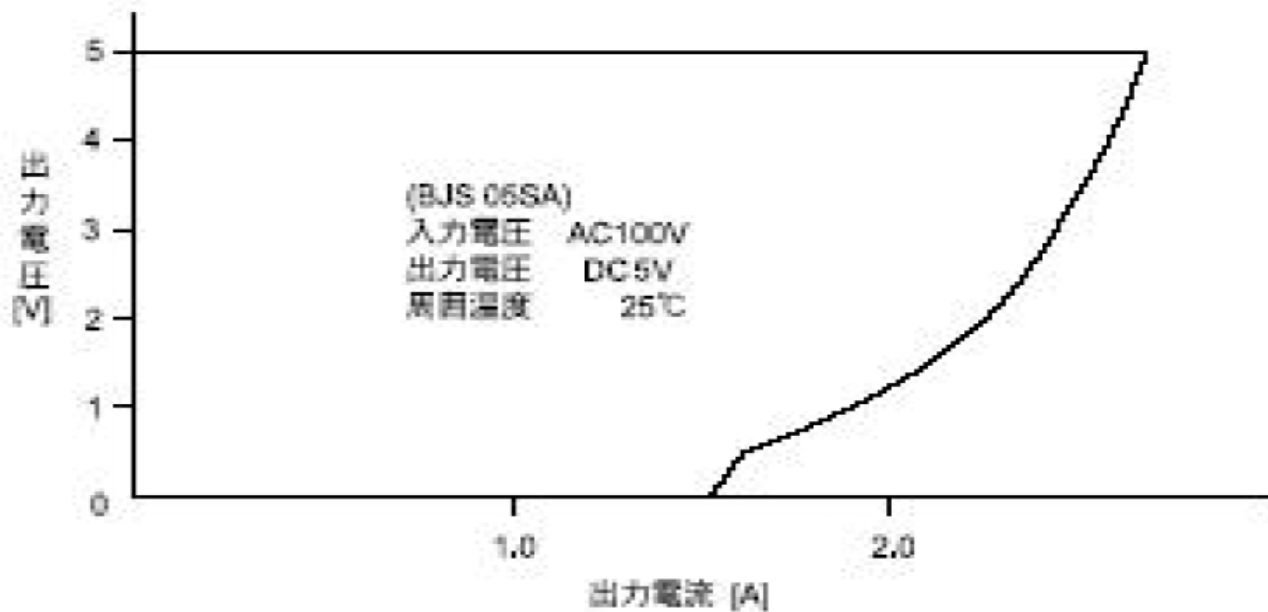
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HIGH QUALITY SWITCHING POWER SUPPLIES

OCP CURVE



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