

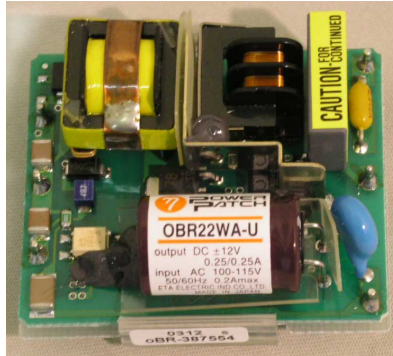


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HIGH QUALITY SWITCHING POWER SUPPLIES

AC/DC SWITCHING POWER SUPPLY
 INPUT: 85~132VAC
 DUAL OUTPUT
 6 WATTS

OBRxWA SERIES

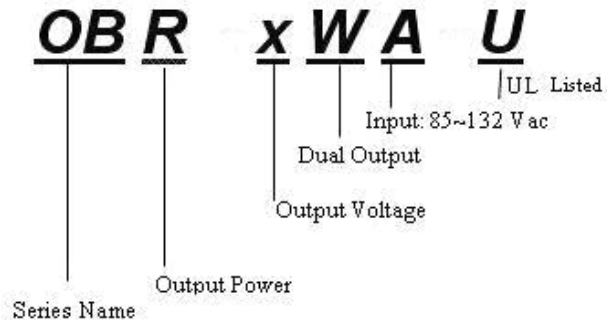


Dimension: 43Wx47.5Lx18.5H [mm]



General Description

OB-Series AC/DC Switching Power Supplies are designed and built to be installed right onto the user's printed circuit board like a piece of "patch-work". They are small, light in weight and cost effective.



Features

1. PCB Mountable
2. Small, Light Weight
3. High Efficiency
4. Cost effective
5. Output Voltage adjustable
6. Over Voltage Protection
7. EMI: complies to FCC/B
8. Safety: UL 1950, CSA 950(C-UL) approved

Input Characteristics		Unit	Models	
			OBR22WA-U	OBR23WA-U
Input Voltage	Vac	AC 115 V [DC 132 V]		
Input Voltage Range	Vdc	AC85~132V [DC110-175V]		
Input Current	A	0.2		
Input Frequency	Hz	50/60Hz		
Input Frequency Range	Hz	47-440Hz		
Inrush Current *1	A	18A (maximum) at AC100V		
Efficiency (typical) *2	%	78	79	

Output Characteristics		Unit	OBR22WA-U		OBR23WA-U	
			+12	-12	+15	-15
Output Voltage	Vdc	+12	-12	+15	-15	
Output Current	A	0.25		0.2		
Voltage Tolerance	V	±0.24		±0.3		
Ripple and Noise(max.) *3	mV	100mVp-p MAX				
Regulation						
a. Static Line Regulation max.	mV	60		75		
b. Static Load Regulation max.	mV	±1.2*4, ±480*5, ±60*6		±1.5*4, ±600*5, ±75*6		
c. Temperature Coefficient *7	%/°C	≤0.03%/°C				
d. Drift max. *8	mV	75		90		
e. Dynamic Load Reg. typ.*9	mV	±480		±600		
f. Recovery Time *9	mS	20ms (Typ.)				
g. Rise Time	mS	100mS (maximum) at rated input/output				
h. Hold Up Time	mS	20mS (typical) at rated input/output				



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Environmental Specification	
Operating Temperature	-20~+71°C
Operating Humidity	30~85%RH(non-condensing)
Storage Temperature	-20 to +85°C
Storage Humidity	20~90%RH(non-condensing)
Withstanding Voltage	Primary-Secondary AC2,000V for 1minute Primary-Frame Ground AC2,000V for 1minute Secondary-Frame Ground AC500V for 1minute
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	294m/s ²
Cooling	Convection
Isolation Resistance	Primary-Secondary-Frame Ground 50MΩ(minimum) by DC500V insulation tester
Environmental Agencies	
EMI(Electromagnetic Interference)	Built to meet FCC Part15-B Class B Built to meet VCCI Class A
Safety	UL: UL1950, C-UL: CSA C22.2 No.950
Function/Protection	
Over current Protection*10	Fold back/current limiting with automatic recovery at discontinuous short circuit conditions
Over voltage Protection	Not Available
Other Specifications	
Leakage Current(typ.)	40uA at AC100V input
MTBF [H] *11	1,000,000
Mechanical Specification	
Dimension [mm]	43Wx47.5Lx18.5H [mm]
Weight (typical)	open board type:27g[unit with chassis/cover:30g]

Conditions:

- *1 cold start
- *2 at DC130V input and rated output
- *3 measured by a bayonet probe at the output connector at a 0 to 100MHz bandwidth
- *4 when output current changed from minimum rated current to rated current keeping the current of other output below minimum rated current
- *5 when output current changed from minimum rated current to rated current keeping the current of other output above minimum rated current
- *6 when output current of both outputs changed from 0mA to rated current identically
- *7 at -10 to +71°C
- *8 when output current of both outputs changed from 0mA to rated current identically only for 7hours from 1hour after switch-on at 25°C and rated input/output
- *9 when output current changed rapidly between 25% and 75% of rated current at AC100V input
- *10 satisfy the above-mentioned specifications only for less than 1minute of over current and short circuit
- *11 may vary on input voltage and load conditions

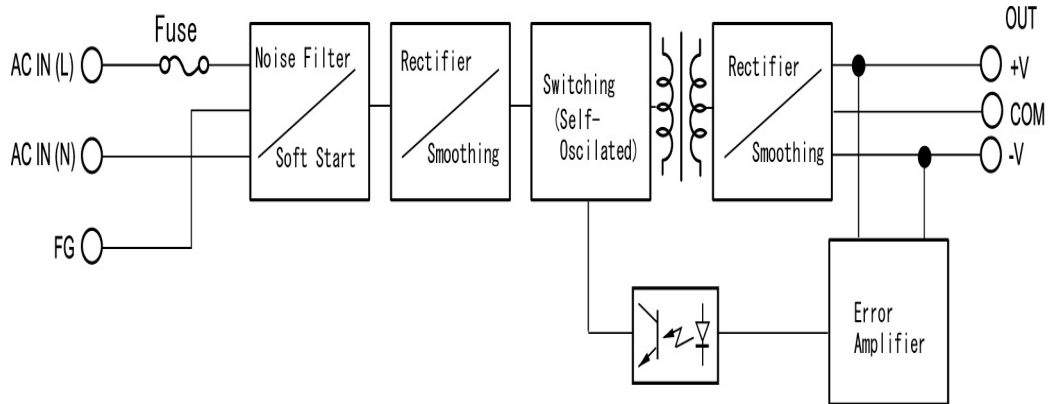




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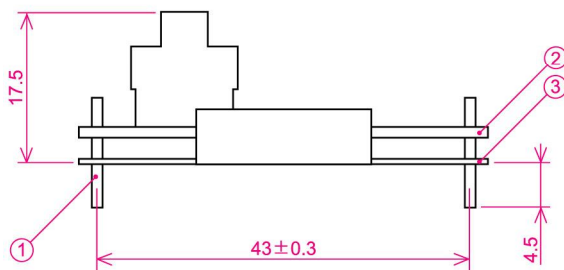
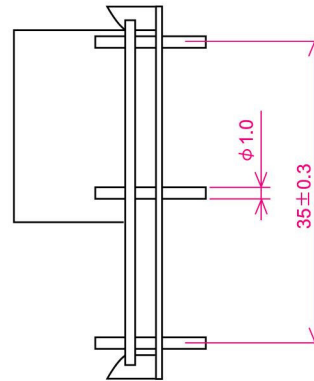
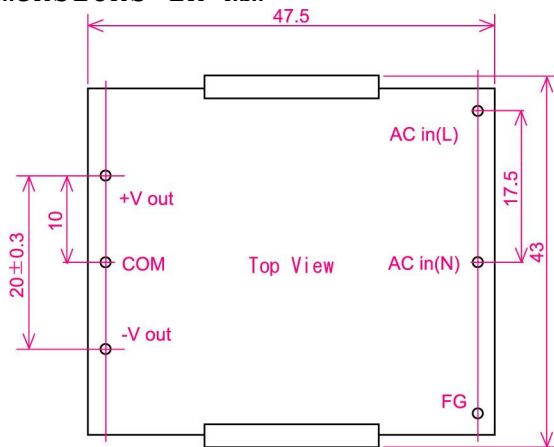
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BLOCK DIAGRAM



DIMENSION DIAGRAM

** Dimensions in mm



- ① 1.0DIA PIN Material:BsB 2700 1/2H
Copper Plating 1~3μm
Solder Plating 3~8μm
 - ② Double-sided PCB FR4t=1.0
 - ③ Insulator UL94V2
- * Tolerance ±0.5



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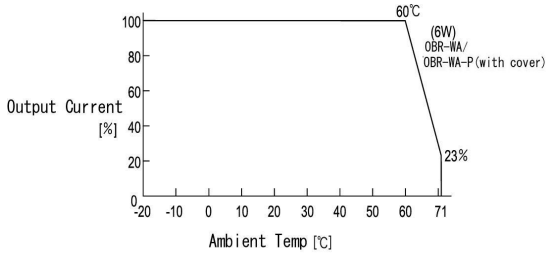
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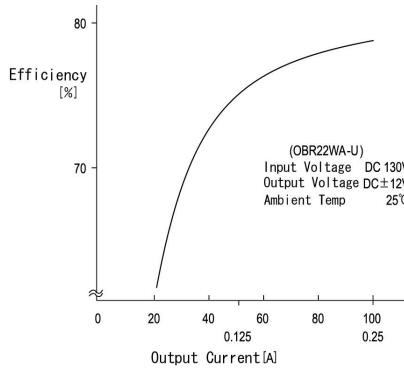
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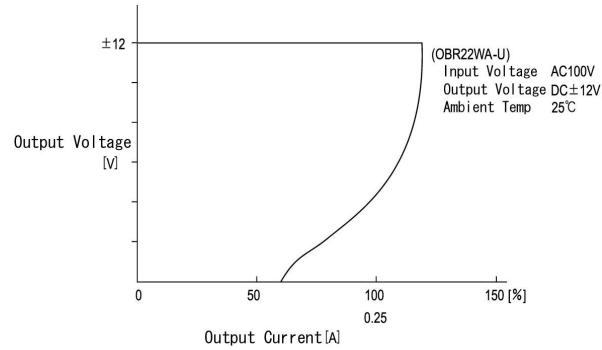
DERATING CURVE



EFFICIENCY CURVE



OCP CURVES



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