



ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

AC/DC SWITCHING POWER SUPPLY
SINGLE CHANNEL OUTPUT
60 WATTS
UNIVERSAL INPUT

OBH60S SERIES



General Description



Application

Broad needs

Input

Input Voltage Range:	AC85~265V or 100~370VDC
Input current:	2A max (115VAC), 1A max (230VAC)
Frequency Range:	47~63 Hz
Inrush Current: *1, *4	30A (max.) at AC115VAC 50A (max.) 230VAC

Features

1. 4000VAC output-input isolation
2. -40°C starting
3. PCB Mountable
4. Over power, short circuit, over voltage protection

Options

Screw Terminal (add suffix "-S")





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Output Characteristic		Models		
Unit	OBH60S-5	OBH60S-9	OBH60S-12	
Output Voltage	Vdc	5	9	12
Output Current	mA	10000	6660	5000
Ripple (max)	mVpp	<0.2% Vo + 40 max		
Noise(max)	mVpp	<0.5% Vo + 50 max		
Voltage Accuracy		±2%		
Voltage Trim		±10%		
Capacitive Load (max)	uF	80000	28000	14000
Hold up time	mS	10mS min.		
Switching Frequency	kHz	100		
Minimum Load		1%		
Regulation				
a. Line Regulation [max]		±1%		
b. Load Regulation	mV	±1%		
c. Temperature Coefficient	/°C	±0.02% /°C		

Efficiency	*1	%	82	84	86
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Output Characteristic		Models		
Unit	OBH60S-15	OBH60S-24	OBH60S-48	
Output Voltage	Vdc	15	24	48
Output Current	mA	4000	2500	1250
Ripple (max)	mVpp	<0.2% Vo + 40 max		
Noise(max)	mVpp	<0.5% Vo + 50 max		
Voltage Accuracy		±2%		
Voltage Trim		±10%		
Capacitive Load (max)	uF	12000	4000	950
Hold up time	mS	10 mS min.		
Switching Frequency	kHz	100		
Minimum Load		1%		
Regulation				
a. Line Regulation [max]		±1%		
b. Load Regulation	mV	±1%		
c. Temperature Coefficient	/°C	±0.02% /°C		

Efficiency	*1	%	86	86	86
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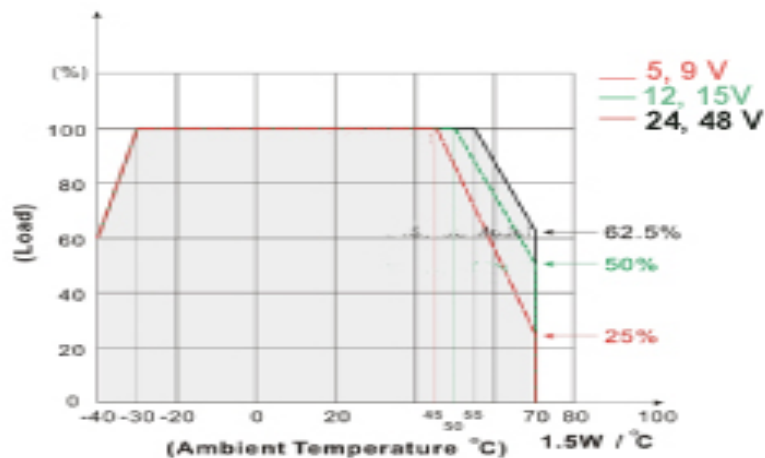
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Conditions:

- *1 Rated input and Rated output
- *2 at Output current quick change 25% to 75%
- *3 At 100% load (convection cooling)
- *4 Cold start at 25 °C Ambient temp.

Environmental Specification	
Operating Temperature*3	-40 to +70 °C with derating
Storage Temperature	-50 to +85 °C
Humidity	95% RH max
Isolation Voltage	4000V Input-Output 1500V Input-FG 500V Output-FG
Cooling	Convection
MTBF	>130,000 hours
Leakage Current	500μA max
Environmental Agencies	
Line Conducted Noise [EMI]	Built to meet EN55022-B
Noise immunity	EN 55024
Safety	CE, cUL, UL 60950
Function/Protection	
Over Power Protection	Automatic recovery
Over voltage Protection	Zener diode clamp
Short circuit Protection	Automatic recovery
Mechanical	
Dimension [mm]	58.5W × 109.0L × 30.0H ±0.1
Weight [g] (typical)	310

Derating Curves

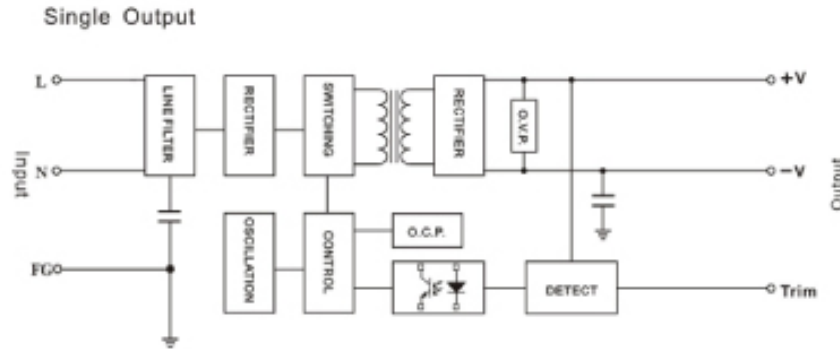




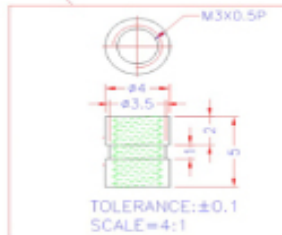
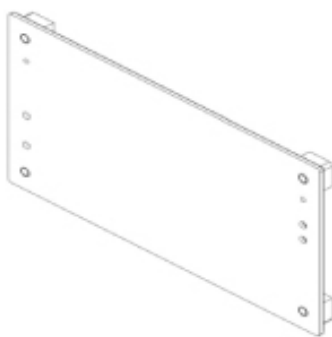
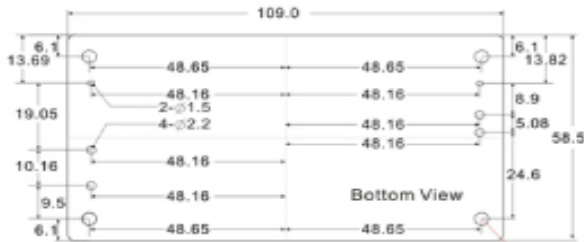
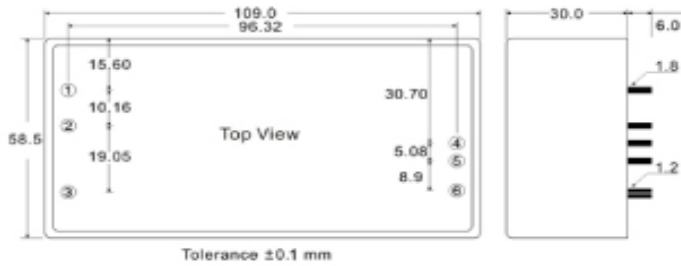
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Block Diagram



Mechanical Dimensions



PIN#	SINGLE
1	AC IN (N)
2	AC IN (L)
3	FG
4	+DC OUT
5	-DC OUT
6	Trim



ETA USA

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"-S1"	"-S2"																												
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