



ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

DC/DC SWITCHING POWER SUPPLY
SINGLE CHANNEL OUTPUT
15 WATTS

OCH15S SERIES



General Description

Features

1. Power module for PCB mountable
2. Low Cost, high reliability
3. 2:1 input range
4. Regulated Output
5. Low ripple and Noise

Options

Remote ON/OFF

Application

Broad needs

Input

Input Voltage Range:	DC9~18V OCH10S12-XX
	DC18~36V OCH5S24-XX
	DC36~75V OCH15S48-XX

Switching frequency: 300kHz (typ.)





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Output Characteristic	Unit	Models				
		OCH15S12-3.3	OCH15S12-5	OCH15S12-12	OCH15S12-15	OCH15S12-24
Output Voltage	Vdc	3.3	5	12	15	24
Output Current	mA	3000	3000	1250	1000	625
Ripple		<0.2%Vout+ 40mVpp				
Noise(max)		<0.5%Vout + 50mVpp				
Voltage Accuracy	V	±2%				
Regulation						
a. Line Regulation [max]	mV	± 0.5%				
b. Load Regulation	mV	± 1%				
c. Temperature Coefficient	/°C	± 0.02%				

Efficiency	*1	%	77	80	82	84	84
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Output Characteristic	Unit	Models				
		OCH15S24-3.3	OCH15S24-5	OCH15S24-12	OCH15S24-15	OCH15S24-24
Output Voltage	Vdc	3.3	5	12	15	24
Output Current	mA	3000	3000	1250	1000	625
Ripple		<0.2%Vout+ 40mVpp				
Noise(max)		<0.5%Vout + 50mVpp				
Voltage Accuracy	V	±2%				
Regulation						
a. Line Regulation [max]		± 0.5%				
b. Load Regulation		± 1%				
c. Temperature Coefficient	/°C	± 0.02%				

Efficiency	*1	%	77	82	85	86	87
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Output Characteristic	Unit	Models				
		OCH15S48-3.3	OCH15S48-5	OCH15S48-12	OCH15S48-15	OCH15S48-24
Output Voltage	Vdc	3.3	5	12	15	24
Output Current	mA	3000	3000	1250	1000	625
Ripple		<0.2%Vout+ 40mVpp				
Noise(max)		<0.5%Vout + 50mVpp				
Voltage Accuracy	V	±2%				
Regulation						
a. Line Regulation [max]		± 0.5%				
b. Load Regulation		± 1%				
c. Temperature Coefficient	/°C	± 0.02%				

Efficiency *1	%	79	83	86	87	87

Conditions:

*1 Rated input and Rated output

*2 at Output current quick change 25% to 75%

*3 At 100% load (convection cooling)

Environmental Specification	
Operating Temperature*3	-25 to +70 °C (with derating)
Storage Temperature	-55 to +105 °C
Storage Humidity	95% RH [non-condensing] max
Isolation Resistance	Input-Output 100MΩ
Isolation Voltage	1600 VDC
Isolation Capacitance	1000pF
Cooling	Convection
MTBF	>800,000 hours at 25°C
Function/Protection	
Short circuit Protection	Current limit, auto-recovery
Over Voltage Protection	Zener Diode Clamp
Over Power Protection	Works at over 120% and auto-recovery
Mechanical	
Dimension [mm]	50.1W × 25.4L × 10.8H ±0.5
Weight [g] (typical)	32

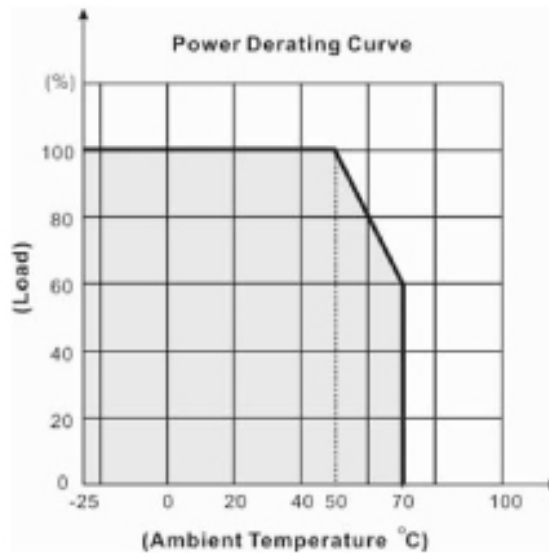




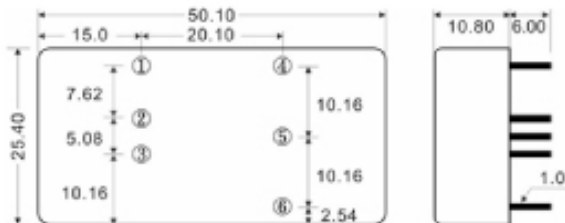
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Derating Curves



Mechanical drawings



PIN#	Single	Dual
1	ON / OFF CTL (Optional)	ON / OFF CTL (Optional)
2	-DC IN	-DC IN
3	+DC IN	+DC IN
4	-DC OUT	-DC OUT
5	NO PIN	COMMON
6	+DC OUT	+DC OUT





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Block Diagram

Single Output

