



ETA-USA

HIGH QUALITY SWITCHING POWER SUPPLIES

DC/DC SWITCHING POWER SUPPLY
DUAL CHANNEL OUTPUT
10 WATTS

OCH10D SERIES



General Description

Features

1. Power module for PCB mountable
2. 2:1 input range
3. Regulated Output
4. Low ripple and Noise

Options

Application

Broad needs

Input

Input Voltage Range: DC9~18V OCH10D12-XX
DC18~36V OCH10D24-XX
DC36~75V OCH10D48-XX

Switching frequency: 300kHz (typ.)





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Output Characteristic	Unit	Models					
		OCH10D12-5		OCH10D12-12		OCH10D12-15	
Output Voltage	Vdc	+5	-5	+12	-12	+15	-15
Output Current	mA	+1000	-1000	+416	-416	+333	-333
Ripple	mVpp	<0.2% Vout + 20mV max					
Noise(max)	mVpp	<0.5% Vout + 50mV max					
Voltage Accuracy	V	±2%					
Capacitor Load (max.)	uF	+1200	-1200	+330	-330	+120	-120
Regulation							
a. Line Regulation [max]	mV	± 0.5%					
b. Load Regulation	mV	± 1%					
c. Temperature Coefficient	/°C	± 0.02%					
Efficiency *1	%	83		86		86	

Output Characteristic	Unit	Models					
		OCH10D24-5		OCH10D24-12		OCH10D24-15	
Output Voltage	Vdc	+5	-5	+12	-12	+15	-15
Output Current	mA	+1000	-1000	+416	-416	+333	-333
Ripple	mVpp	<0.2% Vout + 20mV max					
Noise(max)	mVpp	<0.5% Vout + 50mV max					
Voltage Accuracy	V	±2%					
Capacitor Load (max.)	uF	+1200	-1200	+470	-470	+330	-330
Regulation							
a. Line Regulation [max]		± 0.5%					
b. Load Regulation		± 1%					
c. Temperature Coefficient	/°C	± 0.02%					
Efficiency *1	%	83		87		86	





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Output Characteristic	Unit	Models					
		OCH10D48-5		OCH10D48-12		OCH10D48-15	
Output Voltage	Vdc	+5	-5	+12	-12	+15	-15
Output Current	mA	+1000	-1000	+416	-416	+333	-333
Ripple	mVpp	<0.2% Vout + 20mV max					
Noise(max)	mVpp	<0.5% Vout + 50mV max					
Voltage Accuracy	V	±2%					
Capacitor Load (max.)	uF	+1200	-1200	+470	-470	+330	-330
Regulation							
a. Line Regulation [max]		± 0.5%					
b. Load Regulation		± 1%					
c. Temperature Coefficient	/°C	± 0.02%					
Efficiency *1	%	82		87		86	

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 +60 °C (at full load)
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 Power Protection	Works at over 120% and auto-recovery
Mechanical	
Dimension [mm]	31.8W × 20.3L × 10.2H ±0.5
Weight [g] (typical)	20

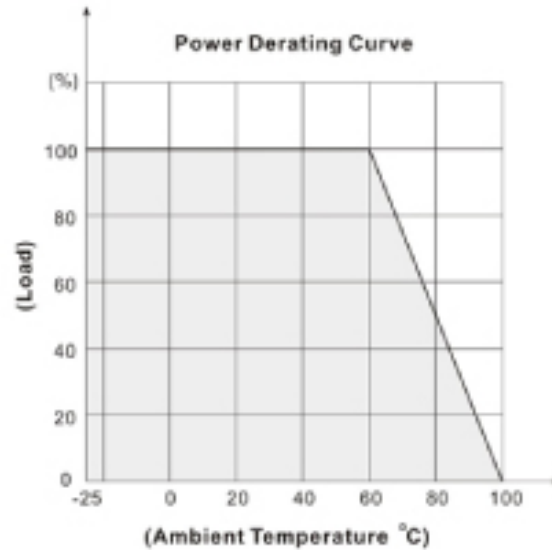




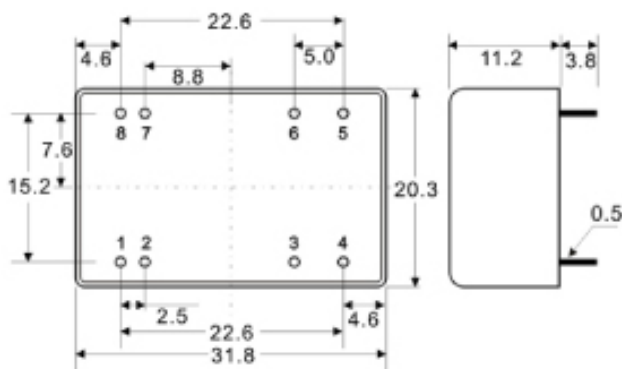
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Derating Curves



Mechanical drawings



Tolerance ± 0.5 mm

PIN#	Single	Dual
1	-VIN	-VIN
2	-VIN	-VIN
3	NO PIN	COMMON
4	NC	-VOUT
5	+VOUT	+VOUT
6	-VOUT	COMMON
7	+VIN	+VIN
8	+VIN	+VIN





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Block Diagram

Dual Outputs

