



ETA-USA

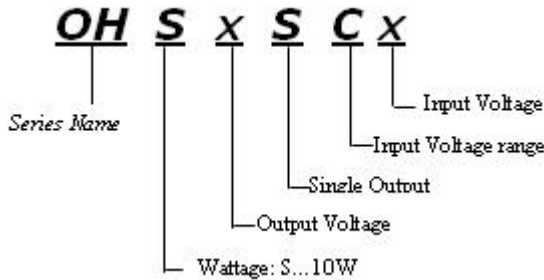
HIGH QUALITY SWITCHING POWER SUPPLIES

DC/DC SWITCHING POWER SUPPLY
DC INPUT 12-24, 24-48
SINGLE OUTPUT
10 WATTS

OHSxSCx SERIES



Dimension: 25.4Wx50.8Lx11H [mm]
1Wx2Lx0.44H [Inch]



Application

Telecommunication, office equipment, industrial machines and electronics, automation, robotics, household equipment.

General Description

In response to market demands for "distributed power" ETA have developed a new DC/DC converter, suitable for PCB mounting. The open board design of this series resulted to a lighter weight, lower cost and smaller size. This is an industries pin configuration. Wide input voltage range covers 8VDC to 32VDC and 18VDC to 72 VDC.

Features

1. PCB Mountable
2. Small, Light Weight
3. Isolation Voltage: 500 Vmin
4. Ultra wide input-range(4-72Vdc)
5. Wide operating temp. Range(-20°C~+71°C)
6. Small input current at no load
7. Fixed switching frequency 170kHz
8. Over current protection
9. The pin layout is compatible to standard
10. Wide range input (8V~32VDC & 18V~72VDC) 4:

DC INPUT: 12-24V

Input Characteristics	Unit	Models							
		OHS05SC1224		OHS12SC1224		OHS15SC1224		OHS24SC1224	
Input Voltage	Vdc	12	24	12	24	12	24	12	24
Input Voltage Range	Vdc	DC8V~32V							
At No Load Typ.	mA	56	45	73	61	56	49	56	52
At Rated Load Typ.	mA	1040	530	1095	561	1035	528	1053	524
Input Leak Voltage Typ	[mVp-p]	300	200	300	200	300	200	300	200
Efficiency (typical)	%	80	78	82	80	84	82	85	83

DC INPUT: 24-48V

Input Characteristics	Unit	Models							
		OHS05SC2448		OHS12SC2448		OHS15SC2448		OHS24SC2448	
Input Voltage	Vdc	12	24	12	24	12	24	12	24
Input Voltage Range	Vdc	18 ~ 72							
At No Load Typ.	mA	21	19	25	23	28	25	26	24
At Rated Load Typ.	mA	502	252	535	267	517	258	511	256
Input Leak Voltage Typ	[mVp-p]	300	200	300	200	300	200	300	200
Efficiency (typical)	%	83	82	84	84	85	85	87	87





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Output Characteristics		OHS05SCx		OHS12SCx		OHS15SCx		OHS24SCx	
	Unit	1224	2448	1224	2448	1224	2448	1224	2448
Output Voltage	Vdc	5		12		15		24	
Output Current	A	2		0.9		0.7		0.45	
Voltage tolerance		± 0.1V MAX		± 0.24V MAX		± 0.3V MAX		± 0.48V MAX	
Ripple and Noise(max.)	mV	100mVp-p MAX							
Regulation									
a. Line Regulation	mV	25		60		75		120	
b. Dynamic Line Reg	mV	100		100		100		200	
c. Load Regulation		25		60		75		120	
d. Temperature Coefficient	%/°C	0.03[%/°C] Max.							
e. Drift / Time effect	mV	40		75		90		135	
f. Dynamic Load Reg. Max	mV	250		600		750		1200	
g. Hold Up Time	mS	10mS typical							

Function/Protection	
Over current Protection	Fold back protection (Automatic recover)
Over voltage Protection	Clamp
Environmental Specification	
Operating Temperature	-20~+71°C (50°C 3.5%/°C)
Operating Humidity	20~90%RH
Storage Temperature	-20 to +85°C
Vibration	(5~10Hz) 10mm, (10~55Hz) 2G X, Y, Z each 30 Minutes
Shock	30G
Isolation voltage	Input-output 500v AC 1 Minute (At room temperature and humidity)
Isolation resistance	Input-output 500v DC 50M (At room temperature and humidity)
Mechanical Specification	
Dimension [mm]	25.4x50.8x11mm
Weight (typical)	14g



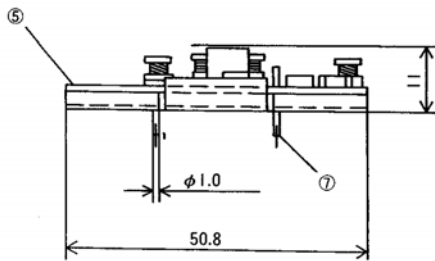
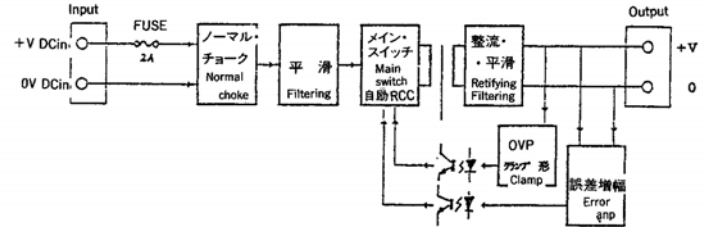
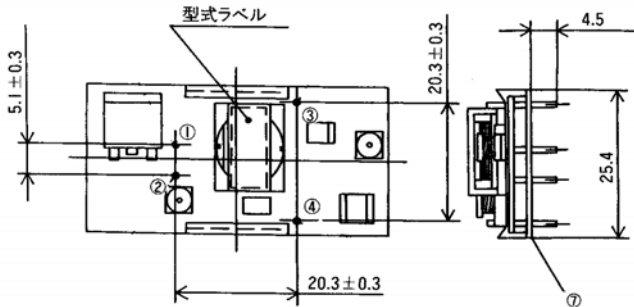


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DIMENSION DIAGRAM

BLOCK DIAGRAM



■ 端子台接続図 / Terminal connection

接続 (Function)
1 0 Vin
2 + Vin
3 0 Vout
4 + Vout

- ⑤ プリント基板, FR4 t=1.0 両面スルーホール
 - ⑥ PC(透明)UL94V2 Polycarbonate
 - ⑦ 1.0 DIA PIN 材質 BsB 2700 1/2H
処理 銅メッキ 1~3μm
半田メッキ 3~6μm
- ① Double-sided printed through hole wiring board.
② Bakelite Vo t=0.5
③ 1.0φ Material : BsB 2700 1/2H
Processing : Copper-plated 1~3μm
Solder-plated 3~6μm
Tolerance ±0.5

■ プリント基板実装穴加工寸法 (PCB Mounted drawing)

