



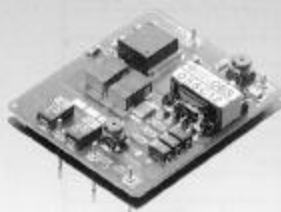
POWER SOURCE

DC/DC CONVERTER

Single, 2ch

10W

DC 8~18V
DC18~72V



Super-small, high efficiency

SINGLE-OUTPUT OBS-S C SERIES
DUAL-OUTPUT OBS-WC SERIES

warranty 3 years

★OBS SC12 (DC12V) 39×46×11 mm

Model	Input	Input current on no-load	Output	Efficiency
OBS 05SC12	DC 12V	32mA	5V 2.0A	80%
OBS 12SC12		37mA	12V 0.9A	82%
OBS 15SC12		39mA	15V 0.7A	84%
OBS 24SC12		42mA	24V 0.45A	86%

★OBS SC2448 (DC24/48V) 39×46×11 mm

Model	Input	Input current on no-load		Output		Efficiency	
OBS 05SC2448	DC 24/48V	24V:16mA	48V:18mA	5V 2.0A	24V:80%	48V:79%	
OBS 12SC2448		24V:14mA	48V:17mA	12V 0.9A	24V:83%	48V:82%	
OBS 15SC2448	18V~72V	24V:14mA	48V:17mA	15V 0.7A	24V:84%	48V:83%	
OBS 24SC2448		24V:17mA	48V:20mA	24V 0.45A	24V:86%	48V:84%	

★OBS WC12 (DC12V) 39×46×11 mm

Model	Input	Input current on no-load	Output	Efficiency
OBS 22WC12	DC 12V	44mA	±12V 0.45A	82%
OBS 23WC12	8V~18V	47mA	±15V 0.35A	84%

★OBS WC2448 (DC24/48V) 39×46×11 mm

Model	Input	Input current on no-load		Output		Efficiency	
OBS 22WC2448	DC 24/48V	24V:18mA	48V:22mA	±12V 0.45A	24V:83%	48V:81%	
OBS 23WC2448	18V~72V	24V:19mA	48V:23mA	±15V 0.35A	24V:84%	48V:83%	

Following strong market demands of "distributed power" we have developed a new DC/DC converter, suitable for PCB mounting. The non-encapsulated DC/DC converter is very small, light and very competitive. The Input range varies from 8Vdc to 18Vdc, and 18Vdc-72Vdc.

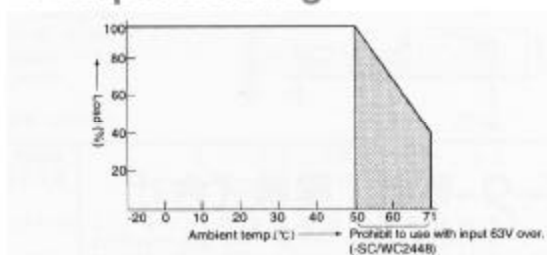
Special Features

1. Super small size, light weight
2. Open-board type
3. High efficiency
4. Isolation voltage : 500V min.
5. Wide range input (DC8~18V, & DC18~72V)
6. Wide operating temperature range
7. Small input current at no-load
8. Low price

Applications

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

Output Derating



[Note] Call for further Information before Purchase.



**POWER
SOURCE**

■ **OBS-SC/WC**

Specification

★	Input voltage 12, 2448		Common									
Model	OBS 05SC		OBS 12SC		OBS 15SC		OBS 24SC		OBS 22WC		OBS 23WC	
	12	2448	12	2448	12	2448	12	2448	12	2448	12	2448
Output												
Voltage	5V		12V		15V		24V		±12V		±15V	
Voltage tolerance	±0.1V Max		±0.24V Max		±0.3V Max		±0.48V Max		±0.24V Max		±0.3V Max	
Ripple&noise	100mVp-p Max											
Line regulation	25mV Max		60mV Max		75mV Max		120mV Max		60mV Max		75mV Max	
Load regulation	25mV Max		60mV Max		75mV Max		120mV Max		±480mV Max ⁽¹⁾		±600mV Max ⁽¹⁾	
Temperature coefficient	0.03% / °C Max (-20~71°C)											
Drift / Time effect	40mV Max		75mV Max		90mV Max		135mV Max		75mV Max		90mV Max	
Hold-up time	10mS Typ											
Isolation												
Isolation voltage	Input-output 500V AC 1 Minute (At room temperature and humidity)											
Isolation resistance	Input-output 500V DC 50MΩ Min (At room temperature and humidity)											
Environment												
Operating temperature	-20~+71°C (50°C 3.5% / °C)											
Storage temperature	-20~+85°C											
Humidity	20~90%RH											
Vibration	(5~10Hz) 10mm, (10~55Hz) 2G X,Y,Z Each 30 Minutes											
Shock	30G											
Additional functions												
Output voltage trimming available	+250mV		+250mV		+350mV		+650mV		—		—	
	-250mV		-900mV		-1.6V		-4V		—		—	
Over current protection	Fold back protection (Automatic reset) SC / WC2448											
Weight	14g											

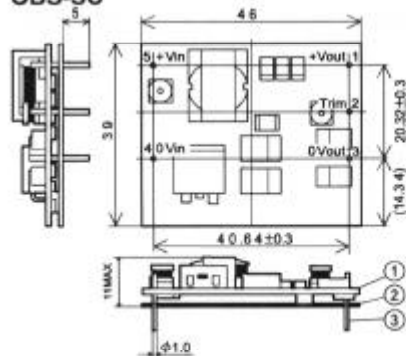
1 Load condition 10~100%

2 Output varies to lower with resistor by connected 1 pin to 2 pin (∞/rating →0Ω/max variation)

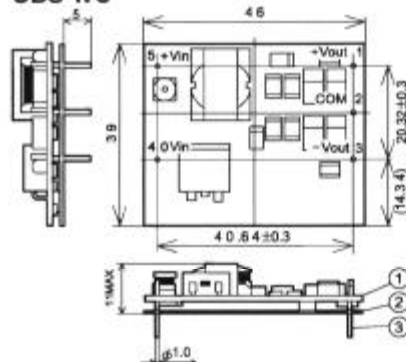
Output varies to upper with resistor by connected 2 pin to 3 pin (∞/rating →0Ω/max variation)

■ **Dimension (mm)**

OBS-SC

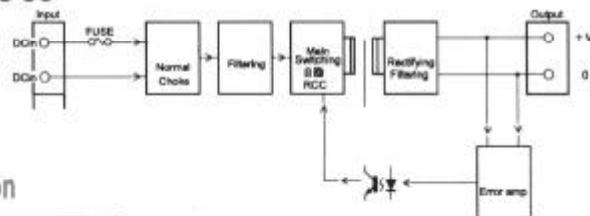


OBS-WC

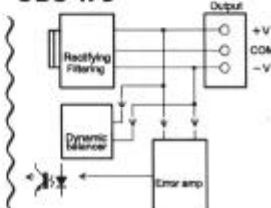


Block Diagram

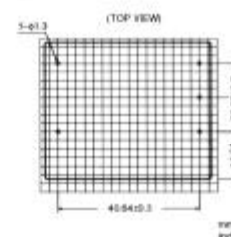
OBS-SC



OBS-WC



■ **(PCB Mounted drawing)**



■ **Terminal connection**

(Function)		
No.	OBS-SC	OBS-WC
1	+V out	+V out
2	trimming	COM
3	0V out	-V out
4	0V in	0V in
5	+V in	+V in

① Double-sided printed through hole wiring board.

② Bakelite V₀1=0.5

③ 1.0φ Material : BSB 2700 1/2H
Processing : Copper-plated 1~3 μm
Solder-plated 3~6 μm

Tolerance ± 0.5