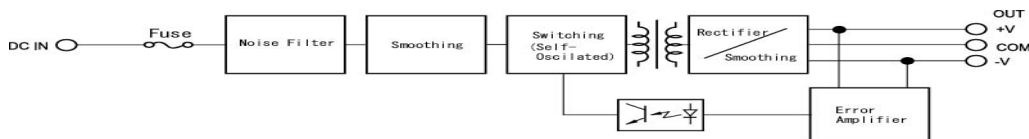


6 WATT DC-DC CONVERTER

**OBR- SC / WC 1224
SINGLE/ DUAL CHANNEL**

Specifications	Model											
OBR**SC/WC1224 6WATTS/SINGLE/2 OUTPUT	OBR05SC1224		OBR12SC1224		OBR15SC1224		OBR24SC1224		OBR22WC1224		OBR23WC1224	
Input Characteristic												
Input Voltage DC[V]	12	24	12	24	12	24	12	24	12	24	12	24
Input Range DC[V]	8-32											
Inrush Current [A]	Not specified											
Input Range												
at no load [mA](typical)	26	30	28	33	28	35	33	34	38	38	38	38
at full load[mA](typical)	520	270	602	312	595	308	611	313	617	312	609	308
Line Back Noise [mVp-p](typical)	300	150	300	150	300	150	300	150	300	150	300	150
Efficiency [%] (typical) *1	80	77	83	80	84	81	85	83	81	80	82	81

BLOCK DIAGRAM



Block diagram OBR-WC

Specifications	Model							
OBR**SC/WC1224 6WATTS/SINGLE/2 OUTPUT	OBR05SC1224	OBR12SC1224	OBR15SC1224	OBR24SC1224	OBR22WC1224		OBR23WC1224	
Output Voltage [V]	5	12	15	24	+12	-12	+15	-15
Output Current [A]	1	0.50	0.40	0.26	0.025-0.25		0.020-0.20	
Voltage Tolerance +/-[mV](maximum) *2	100	240	300	480	240	240	300	300
Ripple and Noise [mVp-p](maximum) *3	100							
Regulation								
a.Static Line Regulation [mV](maximum)	25	60	75	120	60	60	75	75
b.Dynamic Line Regulation +/-[mV](maximum) *4	200	200	200	200	200	200	200	200
c.Static Load Regulation [mV](maximum) *5	25	60	75	120	±1000	±1000	±1000	±1000
[mV](maximum) *6					±480	±480	±600	±600
[mV](maximum) *7					±60	±60	±75	±75
d.Temperature Coefficient *8	0.03%/°C(maximum)							
e.Drift[mV](maximum) *9	40	75	90	135	75	75	90	90
f.Dynamic Load Regulation [mV](typical) *10	150	360	450	720	360	360	450	450
g.Recovery Time *4, *10	20mS(typical)							
Rise up time	20mS(typical) at rated input/output							
Hold up time	Not specified							
Functions								
Overcurrent Protection	Foldback/Current Limiting with automatic recovery at discontinuous short circuit conditions							
Overvoltage Protection	Not available							
Remote Sence	Not available							
Trimming of output voltage[mV] *11	+250	+250	+350	+650				
[mV] *12	-250	-900	-1600	-4000				
Input Fuse	Installed							
Environmental								
Operating Temperature	-20 to 71°C							
(derating) *13	3.5%/°C(50°C to 71°C) (out of warranty ≥1°C)							
Operating Humidity	20-90%/RH(non-condensing)							
Storage Temperature	-20 to +85°C							
Storage Humidity	20 to 90%/RH(non-condensing)							
Withstanding Voltage	Primary-Secondary AC500V for 1minute							
Isolation Resistance	Primary-Secondary 50MΩ(minimum) by DC500V insulation tester							
Capacitance(input-output) [pF](typical)	2200							
Vibration	5-10Hz:10mm double amplitude,10-55Hz:19.6m/s ² ,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)							
Shock	294m/s ²							
Cooling	Convection							
Weight (typical)	open board type:12g							

Conditions:

*1 at 25°Cand rated input/output

*2 OBR**WC1224 satisfies the above-mentioned specifications at the same load conditions on both outputs

*3 measured by a probe at the output connector at a 0 to 100MHz bandwidth

*4 when input voltage changed from 8V to 32V rapidly at rated input

*5 when output current changed from 0mA to rated current keeping the current of other output below minimum rated current at rated input

*6 when output current changed from minimum rated current to rated current keeping the current of other output above minimum rated current at rated input

*7 output current of both outputs changed from 0mA to rated current identically at rated input

*8 at -20 to +71°C

*9 for 7hour period after 1hour warm-up at 25°Cand rated input/output

*10 when output current changed from 25% of rated current to 75% rapidly at rated input

*11 to reduce output voltage,put a resistor between pin"0" and trimming pin

*12 to increase output voltage,put a resistor between pin"+" and trimming pin

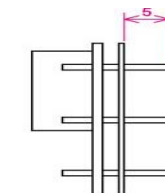
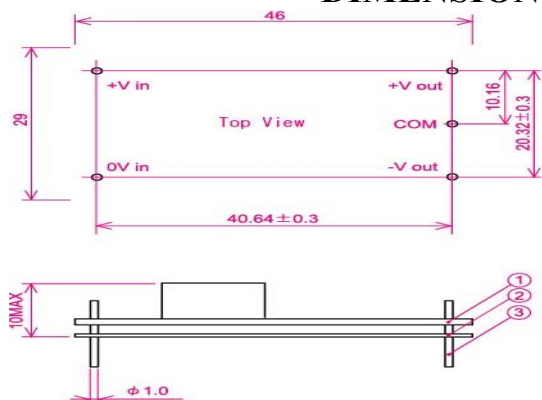


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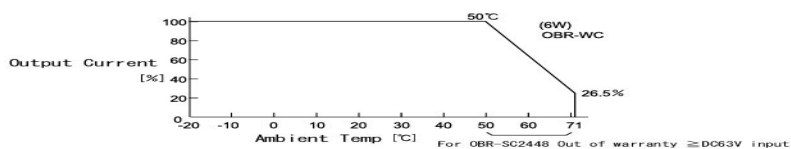
DIMENSION DIAGRAM



- ① Double-sided PCB FR4t=1.0
 - ② t=0.5 Insulator V0
 - ③ 1.0DIA PIN Material:BsB 2700 1/2H
Copper Plating 1~3μm
Solder Plating 3~6μm
- * Tolerance ±0.5

Dimension Diagram OBR-WC2448

DERATING CURVE



Derating Curve OBR-SC-6W