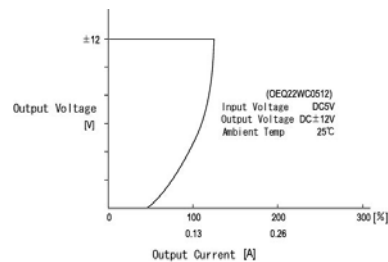


# 3 WATT DC-DC CONVERTER

OEQ- SC / WC 0512  
SINGLE/ DUAL CHANNEL

Specifications OEQ**SC/WC0512 3WATTS/SINGLE/2 OUTPUT	Model											
	OEQ05SC0512	OEQ12SC0512	OEQ15SC0512	OEQ24SC0512	OEQ22WC0512	OEQ23WC0512						
<b>Input Characteristic</b>												
Input Voltage DC[V]	5	12	5	12	5	12	5	12	5	12	5	12
Input Range DC[V]	4.5-16											
Inrush Current [A]	Not specified											
Input Range												
at no load [mA](typical)	42	50	50	57	51	61	60	66	63	73	66	81
at full load[mA](typical)	680	299	805	347	795	344	815	350	860	365	822	352
Line Back Noise [mVp-p](typical)	300	150	300	150	300	150	300	150	300	150	300	150
Efficiency [%] (typical) *1	73	69	74	72	75	72	76	74	72	71	73	71

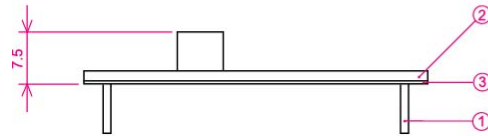
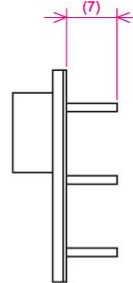
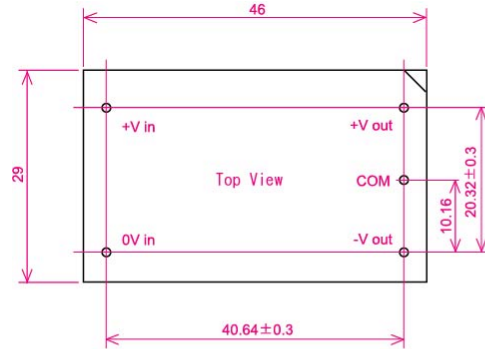
## OCP Curve



OCP Curve OEQ22WC0512

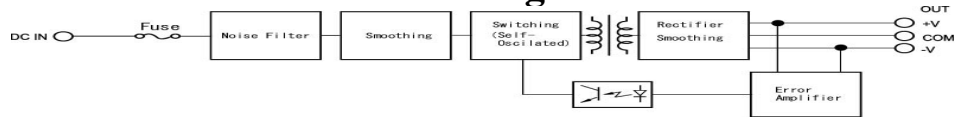
Specifications OEQ**SC/WC0512 3WATTS/SINGLE/2 OUTPUT	Model							
	OEQ05SC0512	OEQ12SC0512	OEQ15SC0512	OEQ24SC0512	OEQ22WC0512		OEQ23WC0512	
Output Voltage [V]	5	12	15	24	+12	-12	+15	-15
Output Current [A]	0.5	0.25	0.20	0.13	0.013-0.13		0.010-0.10	
Voltage Tolerance +/-[mV](maximum) *2	100	240	300	480	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	480	600	960	480	480	600	600
c.Static Load Regulation +/-[mV](maximum) *5	25	60	75	120	1200	1200	1500	1500
+/-[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	200	480	600	960	480	480	600	600
g.Recovery Time *4,*10	20mS(typical)							
Rise up time	10ms(typical) at rated input/output							
Hold up time	Not specified							
<b>Functions</b>								
Overcurrent Protection >=110% of Rated Output Current [A]	Current Limiting with automatic recovery at discontinuous short circuit conditions							
	0.55	0.275	0.22	0.143	0.143	0.143	0.111	0.111
Overvoltage Protection	Not available							
Remote Sence	Not available							
Trimming of output voltage[mV]	Not available							
Input Fuse	Installed							
<b>Environmental</b>								
Operating Temperature	-20 to 71°C							
(derating)	3.5%/°C (50°C to 71°C)(out of warranty >=71°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:2G,20minutes' period for 60minutes each along X,Y,Z axes(non-operating)							
Shock	,BG							
Cooling	Convection							
Weight (typical)	open board type:7g							

## Dimension Diagram



- ① 1.0DIA PIN Material:BsB 2700 1/2H  
Copper Plating 1~3 $\mu$ m  
Solder Plating 3~8 $\mu$ m
  - ② Double-sided PCB FR4t=1.0
  - ③ t=0.5 Insulator V0
- \* Tolerance  $\pm 0.5$

## Block Diagram



Block Diagram OBQ-WC/OBR-WC/OBS-WC