

1.5 WATT DC-DC CONVERTER

OEJ- SC / WC 0512 SINGLE/ DUAL CHANNEL

Specifications OEJ**SC/WC0512 1.5WATTS/SINGLE/2 OUTPUT	Model											
	OEJ05SC0512		OEJ12SC0512		OEJ15SC0512		OEJ24SC0512		OEJ22WC0512		OEJ23WC0512	
Input Characteristic												
Input Voltage DC[V]	5	12	5	12	5	12	5	12	5	12	5	12
Input Range DC[V]	4.5-16											
Input Current [A]	Not specified											
Input Range												
at no load [mA](typical)	18	19	21	21	23	23	26	28	27	28	29	32
at full load[mA](typical)	416	171	427	176	411	166	405	168	439	178	410	171
Line Back Noise [mVp-p](typical)	200	100	200	100	200	100	200	100	200	100	200	100
Efficiency [%] (typical) *1	72	73	73	74	73	75	77	77	71	73	73	73
Output Voltage [V]	5	12	15	24	12	-12	15	-15				
Output Current [A]	0.3	0.13	0.1	0.065	0.065	0.05						
Voltage Tolerance +/-[mV](maximum)	150	360	450	720	360	450						
Ripple and Noise [mVp-p](maximum)	100											
Regulation												
a.Static Line Regulation [mV](maximum)	25	60	75	120	60	60	75	75				
b.Dynamic Line Regulation +/-[mV](maximum)	250	250	250	300	250	250	250	250				
c.Static Load Regulation +/-[mV](maximum)	25	60	75	120	60	60	75	75				
+/-[mV](maximum) *6					600	600	750	750				
d.Temperature Coefficient *7	0.03%/oC(maximum)											
e.Drift[mV](maximum) *8	45	75	90	135	75	75	90	90				
f.Dynamic Load Regulation +/-[mV](maximum)	250	350	450	600	600	600	750	750				
g.Recovery Time *4,*9	20mS(maximum)											
Rise up time	10mS(maximum) at rated input/output											
Hold up time	Not specified											
Functions												
Overcurrent Protection	Current Limiting with automatic recovery at discontinuous short circuit conditions											
>=110% of Rated Output Current [A]	0.33	0.143	0.11	0.0715	0.0715	0.0715	0.055	0.055				
Overvoltage Protection	Not available											
Remote Sense	Not available											
Trimming of output voltage[mV]	Not available											
Input Fuse	Installed[2A]											
Environmental												
Operating Temperature (derating)	-20 to 71oC 3.5%/oC (50oC to 71oC) (out of warranty)>=50oC at input above63V)											
Operating Humidity	20-90%/RH(non-condensing)											
Storage Temperature	-20 to +85oC											
Storage Humidity	20 to 90%/RH(non-condensing)											
Withstanding Voltage	Primary-Secondary AC500V for 1minute											
Isolation Resistance	Primary-Secondary 50MW(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-operati											
Shock	30G											
Cooling	Convection											
Weight (typical)	open board type:5g											

*1 at 25 °C and rated input/output

*2 OEJ**WC0512 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 4.5V to 16V rapidly at rated output

*5 when output current changed from 0mA to rated current at rated input

OEJ**WC0512 satisfies the above-mentioned specifications at the same load conditions on both outputs

*6 when output current changed from minimum rated current to rated current keeping the current of both outputs within rated current at rated input

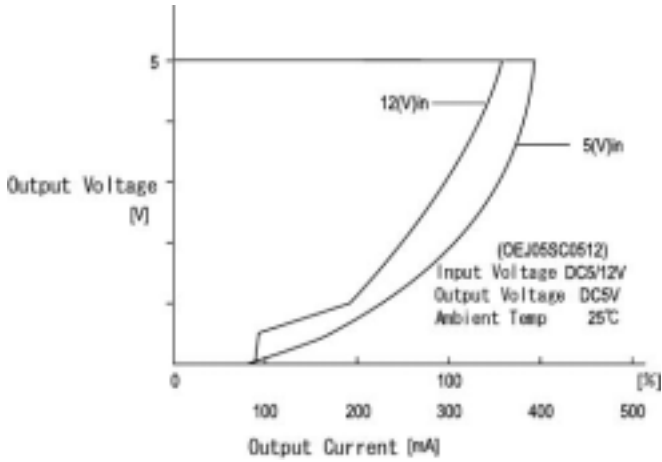
*7 at -20 to +71 °C

*8 for 7hours from 1hour after switch-on at 25 °C and rated input/output

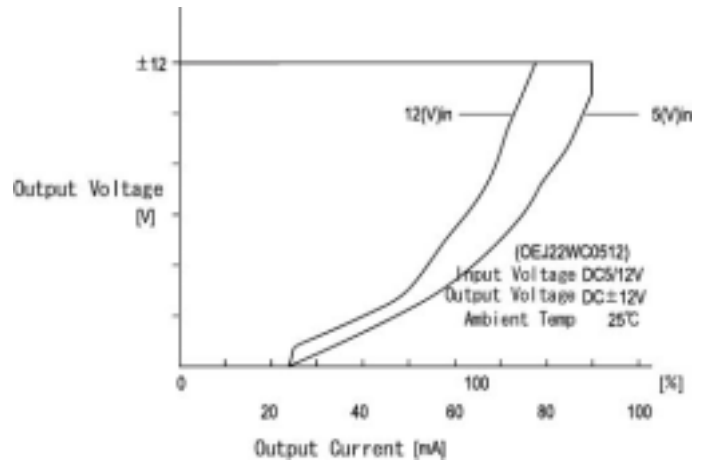
*9 when output current changed from 25% of rated current to 75% rapidly at rated input

OCP CURVES :

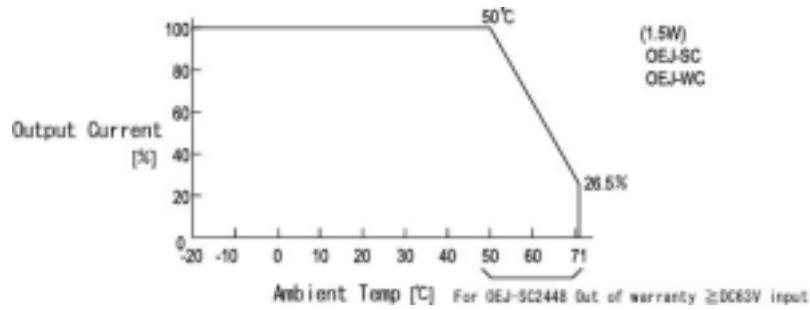
OEJ-SC:



OEJ-WC:

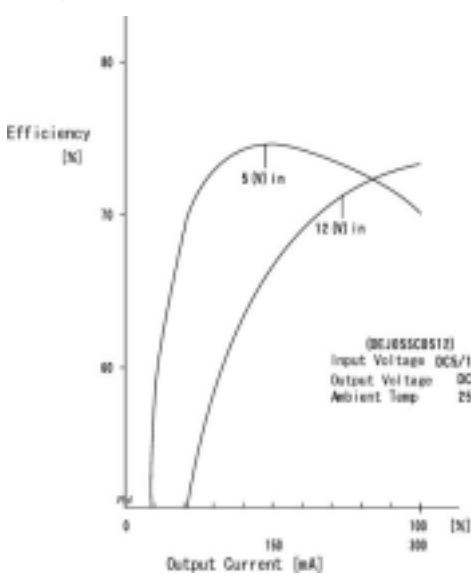


DERATING CURVE OEJ-SC/WC

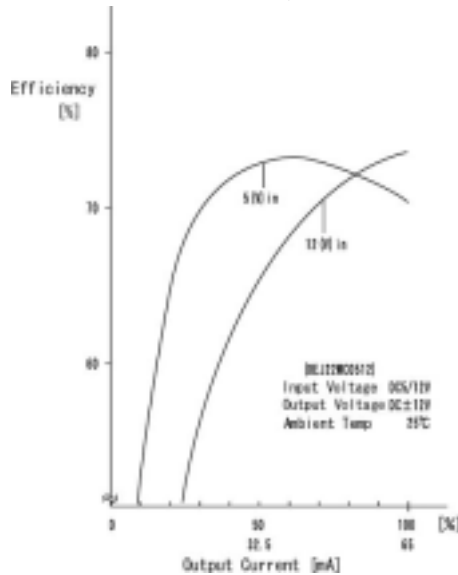


EFFICIENCY CURVE

OEJ-SC:

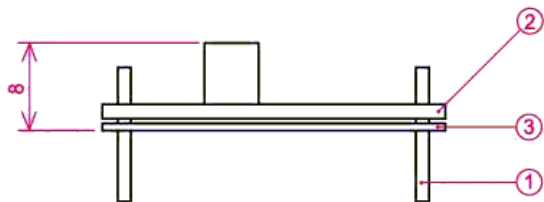
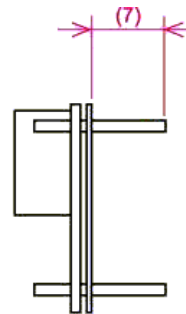
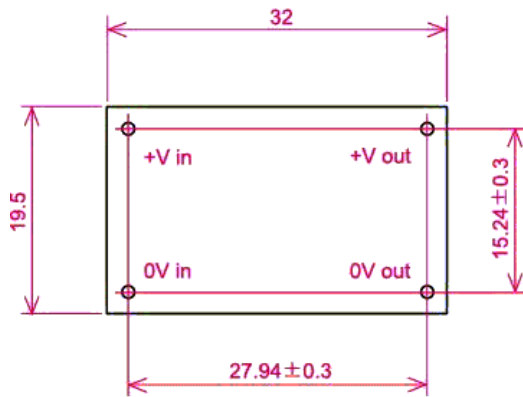


OEJ-WC:



DIMENSION DIAGRAM

OEJ-SC:



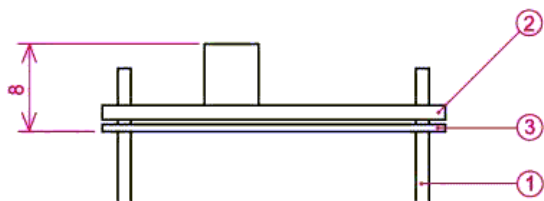
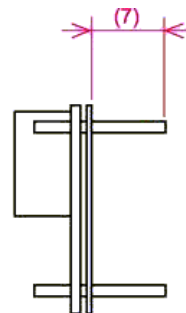
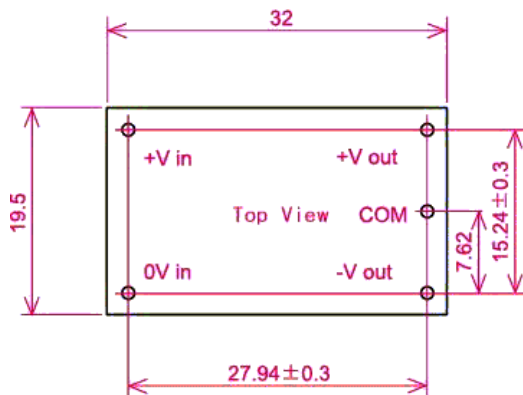
- ① 1.0DIA PIN Material:BsB 2700 1/2H
Copper Plating 1~3 μ m
Solder Plating 3~8 μ m

② Double-sided PCB FR4t=1.0

③ t=0.5 Insulator V0

* Tolerance ± 0.5

OEJ-WC:



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