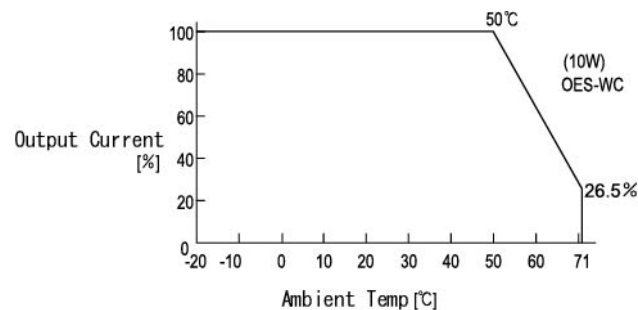


10 WATT DC-DC CONVERTER

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

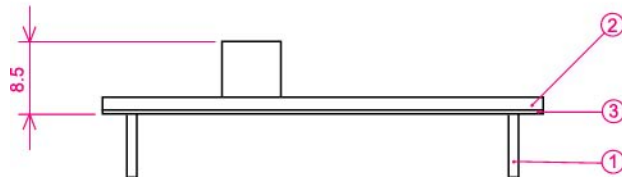
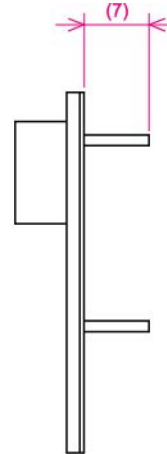
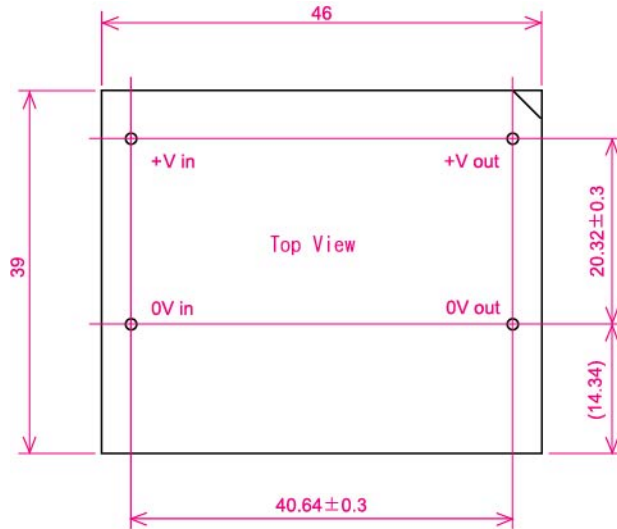
| Specifications OES**SC/WC1224 10WATTS/SINGLE/2 OUTPUT | Model | | | | | | | | | | | |
|---|---------------|-------------|-------------|-------------|-------------|-------------|------|-----|------|-----|------|-----|
| | OES05SC1224 | OES12SC1224 | OES15SC1224 | OES24SC1224 | OES22WC1224 | OES23WC1224 | | | | | | |
| 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) | 50 | 41 | 53 | 45 | 55 | 43 | 65 | 50 | 62 | 48 | 66 | 52 |
| at full load[mA](typical) | 1039 | 532 | 1111 | 569 | 1067 | 546 | 1071 | 548 | 1125 | 576 | 1067 | 546 |
| Line Back Noise [mVp-p](typical) | 300 | 200 | 300 | 200 | 300 | 200 | 300 | 200 | 300 | 200 | 300 | 200 |
| Efficiency [%] (typical) *1 | 80 | 78 | 81 | 79 | 82 | 80 | 84 | 82 | 80 | 78 | 85 | 84 |

Derating Diagram



| Specifications OES**SC/WC1224 10WATTS/SINGLE/2 OUTPUT | Model | | | | | | | |
|---|--|-------------|-------------|-------------|-------------|-------|-------------|-------|
| | OES05SC1224 | OES12SC1224 | OES15SC1224 | OES24SC1224 | OES22WC1224 | | OES23WC1224 | |
| Output Voltage [V] | 5 | 12 | 15 | 24 | +12 | -12 | +15 | -15 |
| Output Current [A] | 2 | 0.9 | 0.7 | 0.45 | 0.45 | 0.45 | 0.35 | 0.35 |
| Voltage Tolerance +/-[mV](maximum) *2 | 100 | 240 | 300 | 480 | 240 | | 300 | |
| Ripple and Noise [mVp-p](maximum) *3 | 100 | | | | | | | |
| Regulation | | | | | | | | |
| a.Static Line Regulation [mV](maximum) | 25 | 60 | 75 | 120 | 60 | | 75 | |
| b.Dynamic Line Regulation +/-[mV](maximum) *4 | 200 | 360 | 450 | 750 | +360 | -360 | +450 | -450 |
| c.Static Load Regulation +/-[mV](maximum) *5 | 25 | 60 | 75 | 120 | 60 | | 75 | |
| +/-[mV](maximum) *6 | | | | | +1200 | -1200 | +1500 | -1500 |
| +/-[mV](maximum) *7 | | | | | | | | |
| d.Temperature Coefficient *8 | 0.03%/°C(maximum) | | | | | | | |
| e.Drift[mV](maximum) *9 | 45 | 75 | 90 | 135 | 75 | | 90 | |
| f.Dynamic Load Regulation +/- [mV](maximum) *10 | 200 | 360 | 450 | 750 | +720 | -720 | +900 | -900 |
| g.Recovery Time *4,*10 | 1mS(typical) | | | | | | | |
| Rise up time | 500ms(typical) at rated input/output | | | | | | | |
| Hold up time | Not specified | | | | | | | |
| Functions | | | | | | | | |
| Overcurrent Protection | Current Limiting with automatic recovery | | | | | | | |
| >=110% of Rated Output Current [A] | 2.2 | 0.99 | 0.77 | 0.495 | 0.495 | 0.495 | 0.385 | 0.385 |
| Overvoltage Protection | Not available | | | | | | | |
| Remote Sence | Not available | | | | | | | |
| Trimming of output voltage[mV] | Not available | | | | | | | |
| Input Fuse | Installed | | | | | | | |
| Environmental | | | | | | | | |
| Operating Temperature | | | | | | | | |
| (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 | 30G | | | | | | | |
| Cooling | Convection | | | | | | | |
| Weight (typical) | open board type:14g | | | | | | | |

Dimension Diagram



① 1.0DIA PIN Material:BsB 2700 1/2H
Solder Plating

② Double-sided PCB FR4t=1.0

③ t=0.5 Insulator V0

*Tolerance ±0.5