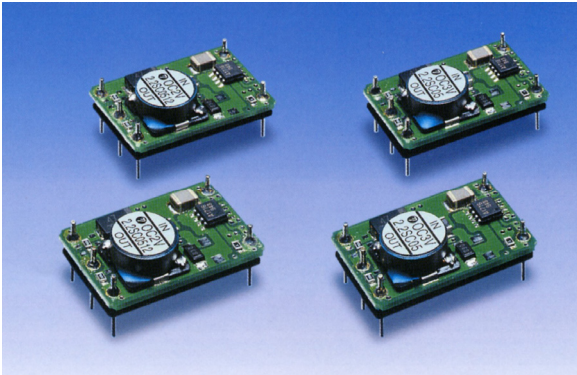


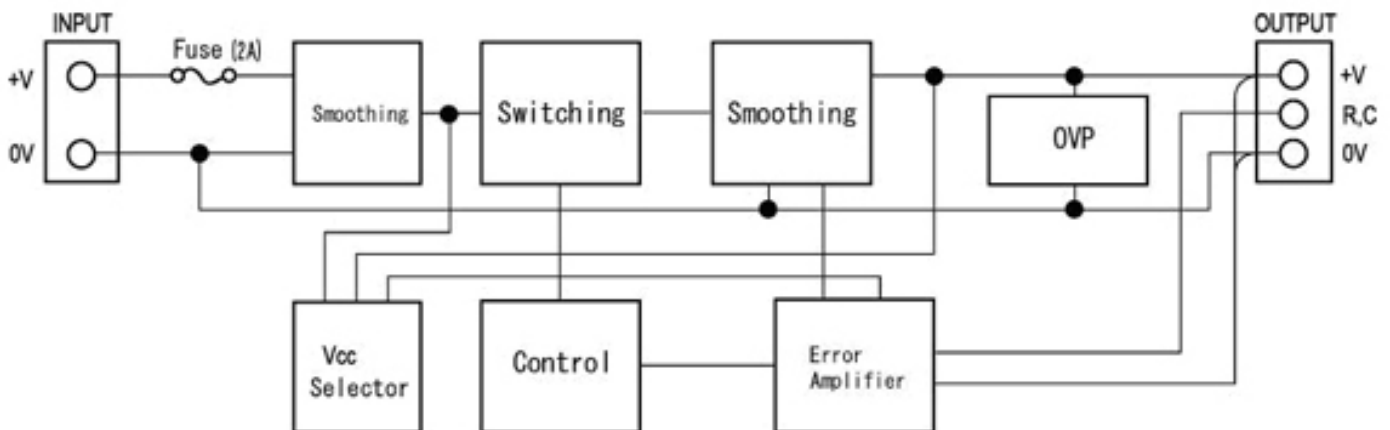
4.6~28.8 WATT NON-ISOLATED DC-DC CONVERTER



OC1V –SC2448

| Specifications<DC/DC> | Model | | | | | | | | | | | |
|---|--------------------|-----|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | OC1**SC2448 SINGLE | | OC1-3.3SC2448 | OC1-05SC2448 | OC1-06SC2448 | OC1-09SC2448 | OC1-12SC2448 | OC1-15SC2448 | OC1-12SC2448 | OC1-15SC2448 | OC1-12SC2448 | OC1-15SC2448 |
| Input Characteristic | | | | | | | | | | | | |
| Input Voltage DC[V] | 24 | 48 | 24 | 48 | 24 | 48 | 24 | 48 | 24 | 48 | 24 | 48 |
| Input Range DC[V] | 20.4 to 56 | | | | | | | | | | | |
| Inrush Current [A] | Not specified | | | | | | | | | | | |
| Input Range | | | | | | | | | | | | |
| at no load [mA](typical) | 4 | 5 | 2 | 2 | 2 | 2 | 3 | 2 | 4 | 4 | 6 | 4 |
| at full load[mA](typical) | 260 | 139 | 355 | 187 | 416 | 218 | 596 | 312 | 714 | 369 | 806 | 416 |
| Input Current when Remote controll is off | 0.39 | 0.9 | 0.42 | 0.93 | 0.42 | 0.92 | 0.37 | 0.9 | 0.34 | 1.47 | 0.2 | 1.5 |
| Line Back Noise [mVp-p](typical) | 1 | 1 | 1 | 1.3 | 1.2 | 1.3 | 1.5 | 2 | 1.5 | 2.0 | 1.5 | 2.5 |
| Efficiency [%] (typical) *1 | 74 | 69 | 81 | 78 | 84 | 80 | 88 | 85 | 91 | 88 | 93 | 90 |

Block Diagram



| Specifications<DC/DC> | Model | | | | | |
|--|---|--------------|--------------|--------------|--------------|--------------|
| OC1**SC2448 SINGLE | OC1-3.3SC2448 | OC1-05SC2448 | OC1-06SC2448 | OC1-09SC2448 | OC1-12SC2448 | OC1-15SC2448 |
| Output Voltage [V] | 3.3 | 5 | 6 | 9 | 12 | 24 |
| Output Current [A] | 1.4 | 1.4 | 1.4 | 1.4 | 1.3 | 1.2 |
| Voltage Tolerance +/-[mV](maximum) | 100 | 150 | 180 | 270 | 360 | 450 |
| Ripple and Noise [mVp-p](maximum) *2 | 200 | | | | | |
| Regulation | | | | | | |
| a.Static Line Regulation [mV](maximum) | 18 | 25 | 30 | 45 | 60 | 75 |
| b.Dynamic Line Regulation +/-[mV](maximum) *3 | 500 | 600 | 600 | 600 | 1000 | 1000 |
| c.Static Load Regulation +/-[mV](maximum) *4 | 18 | 25 | 30 | 45 | 60 | 75 |
| d.Temperature Coefficient *5 | 0.03%/°C(maximum) | | | | | |
| e.Drift[mV](maximum) *6 | 30 | 40 | 45 | 60 | 75 | 90 |
| f.Dynamic Load Regulation +/- [mV](maximum) *7 | 200 | | | | | |
| g.Recovery Time *3,*7 | 5mS(typical) | | | | | |
| Rise up time | 5mS(maximum) at rated input/output | | | | | |
| Hold up time | Not specified | | | | | |
| Functions | | | | | | |
| Overcurrent Protection | Current Limiting with automatic recovery | | | | | |
| ≥10% of Rated Output Current [A] | 1.54 | 1.54 | 1.54 | 1.54 | 1.43 | 1.32 |
| Overvoltage Protection | 6 | 6 | 7.5 | 12 | 15 | 18 |
| Remote Control | Turn on by inputing voltage(4.5 to 56V) between "RC"pin and "0V"pin .Put a 5k ohm resistor between "+ in"pin and "RC"pin when remote on/off is not used | | | | | |
| Remote Sence | Not available | | | | | |
| Trimming of output voltage[mV] | Not available | | | | | |
| Input Fuse | Installed[2A] | | | | | |
| Environmental | | | | | | |
| Operating Temperature | -20 to +71°C | | | | | |
| (derating) | 2%/°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) | | | | | |
| Vibration | 5-10Hz:10mm double amplitude,10-55Hz:2G,3minutes' period for 30minutes each along X,Y,Z axes(non-operating) | | | | | |
| Shock | 3G | | | | | |
| Cooling | Convection | | | | | |
| Weight (typical) | open board type:8g | | | | | |

Conditions:

*1 at 25°C and rated input/output

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

*3 when input voltage changed from 20.4V to 56V rapidly at rated output

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

*5 at -20 to +71°C

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

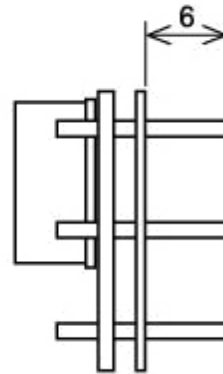
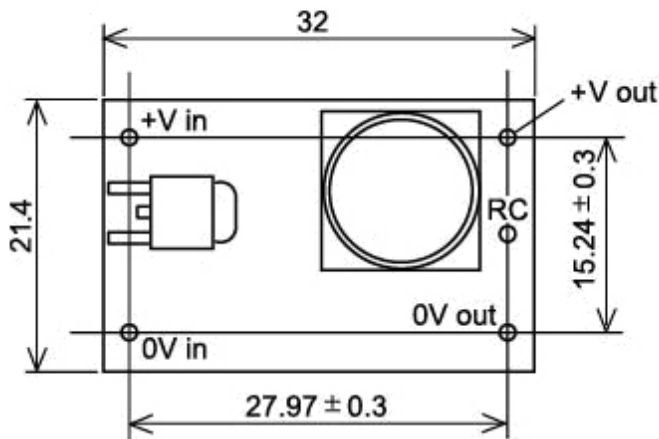
*7 when output current changed from 25% of rated current to 75% rapidly at rated input


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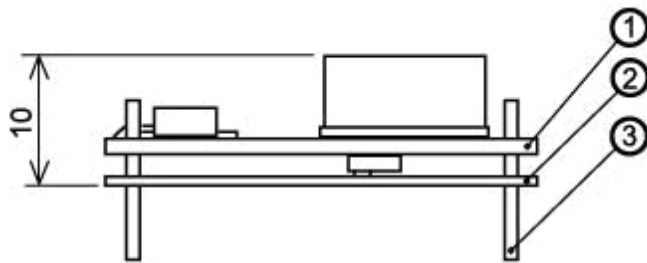
HIGH QUALITY SWITCHING POWER SUPPLIES

ETA-USA Tel: 408-778-2793 Fax: 408-779-2753 e-mail: sales@eta-usa.com

Dimension Diagram



Turn on by inputting voltage (4.5 to 56V) between "RC" pin and "0V" pin .Put a 5k ohm resistor between "+ in" pin and "RC" pin when remote on/off is not used

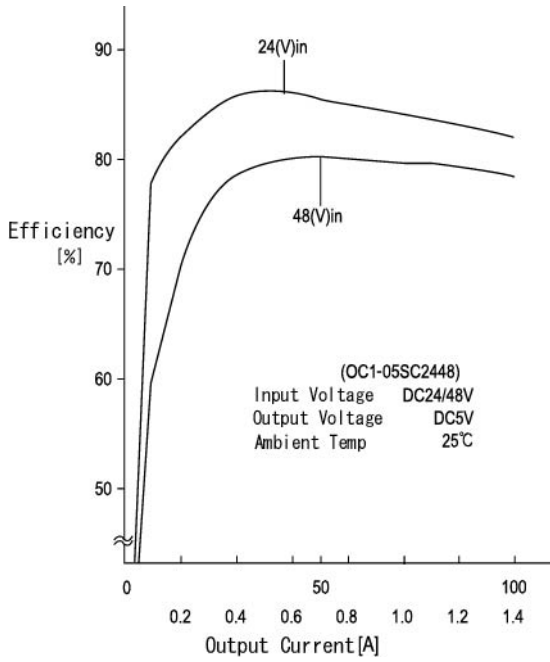


- ① Double-sided PCB FR4t=1.0
- ② t=0.5 Insulator UL94V0
- ③ 1.0DIA PIN Material :BsB 2700 1/2H

Solder Plating

*Tolerance ± 0.5

Efficiency Curve



OCP Curve

