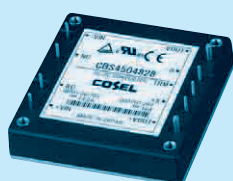


## CBS450

CB S 450 48 28 - □

① ② ③ ④ ⑤ ⑥



- ① Series name  
 ② Single output  
 ③ Output wattage  
 ④ Input voltage  
 ⑤ Output voltage  
 ⑥ Optional  
 R :with Remote ON/OFF  
     Positive logic control  
 T :with Mounting hole  
     φ3.4 thru

| MODEL                 | CBS4504824 | CBS4504828 | CBS4504832 |
|-----------------------|------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 456        | 448        | 400        |
| DC OUTPUT             | 24V 19A    | 28V 16A    | 32V 12.5A  |

## SPECIFICATIONS

|                                     | MODEL                                | CBS4504824                                                                                                             | CBS4504828    | CBS4504832    |
|-------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------|---------------|---------------|
| INPUT                               | VOLTAGE[V]                           | DC38 - 60                                                                                                              | DC36 - 76     | DC36 - 76     |
|                                     | CURRENT[A]                           | *1 10.6typ                                                                                                             | 10.5typ       | 9.3typ        |
|                                     | EFFICIENCY[%]                        | *1 90typ                                                                                                               | 91typ         | 91typ         |
| OUTPUT                              | VOLTAGE[V]                           | 24                                                                                                                     | 28            | 32            |
|                                     | CURRENT[A]                           | 19                                                                                                                     | 16            | 12.5          |
|                                     | LINE REGULATION[mV]                  | 48max                                                                                                                  | 56max         | 64max         |
|                                     | LOAD REGULATION[mV]                  | 48max                                                                                                                  | 56max         | 64max         |
|                                     | RIPPLE[mVp-p]                        | -20 to +100°C *2 180max                                                                                                | 210max        | 210max        |
|                                     |                                      | -40 to -20°C *2 220max                                                                                                 | 260max        | 260max        |
|                                     |                                      | 0 to 15%Load *2 360max                                                                                                 | 430max        | 430max        |
|                                     | RIPPLE NOISE[mVp-p]                  | -20 to +100°C *2 220max                                                                                                | 260max        | 260max        |
|                                     |                                      | -40 to -20°C *2 280max                                                                                                 | 330max        | 330max        |
|                                     |                                      | 0 to 15%Load *2 440max                                                                                                 | 520max        | 520max        |
|                                     | TEMPERATURE REGULATION[mV]           | 0 to +65°C 240max                                                                                                      | 280max        | 280max        |
|                                     |                                      | -40 to +100°C 480max                                                                                                   | 560max        | 560max        |
|                                     | DRIFT[mV]                            | *3 90max                                                                                                               | 90max         | 120max        |
| PROTECTION<br>CIRCUIT AND<br>OTHERS | START-UP TIME[ms]                    | 200max (DCIN 48V, Io=100%)                                                                                             |               |               |
|                                     | OUTPUT VOLTAGE ADJUSTMENT RANGE[V]   | Fixed (TRM pin open), adjustable by external resistor                                                                  |               |               |
|                                     |                                      | 19.2 - 26.0                                                                                                            | 16.8 - 32.2   | 25.6 - 35.2   |
|                                     | OUTPUT VOLTAGE SETTING[V]            | *1 23.52 - 24.48                                                                                                       | 27.44 - 28.56 | 31.36 - 32.64 |
|                                     | OVERCURRENT PROTECTION               | Works over 105% of rating and recovers automatically                                                                   |               |               |
| ISOLATION                           | OVERVOLTAGE PROTECTION[V]            | 27.60 - 33.60                                                                                                          | 32.20 - 39.20 | 36.80 - 44.80 |
|                                     | REMOTE SENSING                       | Provided                                                                                                               |               |               |
|                                     | REMOTE ON/OFF                        | Provided (Negative logic L : ON, H : OFF)                                                                              |               |               |
| ENVIRONMENT                         | INPUT-OUTPUT                         | DC1,500V or AC1,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min(20±15°C)                                          |               |               |
|                                     | INPUT-BASE PLATE                     | DC1,500V or AC1,000V 1minute, Cutoff current = 10mA, DC500V 50MΩ min(20±15°C)                                          |               |               |
|                                     | OUTPUT-BASE PLATE                    | AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15°C)                                                      |               |               |
| SAFETY                              | OPERATING TEMP., HUMID. AND ALTITUDE | -40 to +100°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max |               |               |
|                                     | STORAGE TEMP., HUMID. AND ALTITUDE   | -40 to +100°C, 20 - 95%RH (Non condensing), 9,000m (30,000feet) max                                                    |               |               |
|                                     | VIBRATION                            | 10 - 55Hz, 49.0m/s <sup>2</sup> (5G), 3minutes period, 60minutes each along X, Y and Z axis                            |               |               |
| OTHERS                              | IMPACT                               | 196.1m/s <sup>2</sup> (20G), 11ms, once each along X, Y and Z axis                                                     |               |               |
|                                     | AGENCY APPROVALS                     | UL60950-1, C-UL, EN60950-1                                                                                             |               |               |
| OTHERS                              | CASE SIZE/WEIGHT                     | 57.9×12.7×61.0mm [2.28×0.5×2.4 inches] (W×H×D) / 83g max                                                               |               |               |
|                                     | COOLING METHOD                       | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)                        |               |               |

\*1 At rated input(DC48V), rated load, and aluminum base plate temperature 25°C.

\*2 Ripple and ripple noise is measured by using measuring board with recommended capacitor Co &amp; the film capacitor 0.1μF. Refer to the manual.

\*3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

\*4 Refer to the manual for the input range.

## External view

