

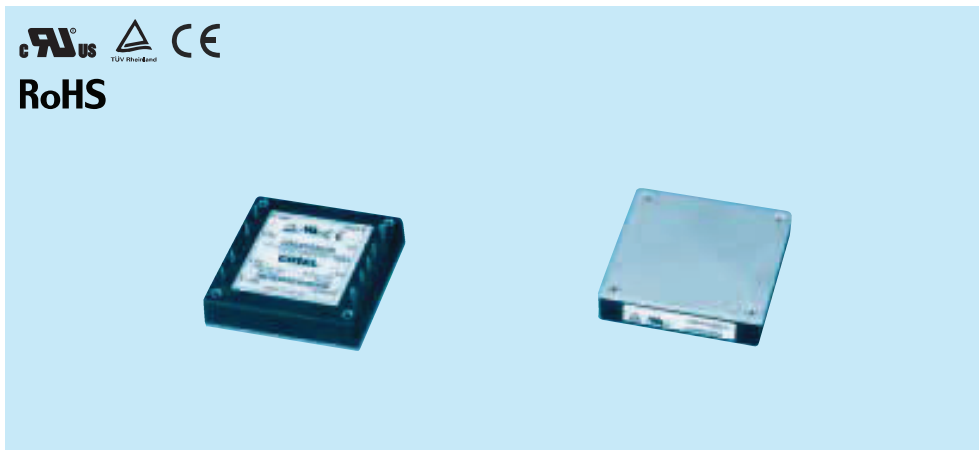
COSEL DC-DC Converters Power Module type

CBS450

Ordering information

CB
S
450
48
28
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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

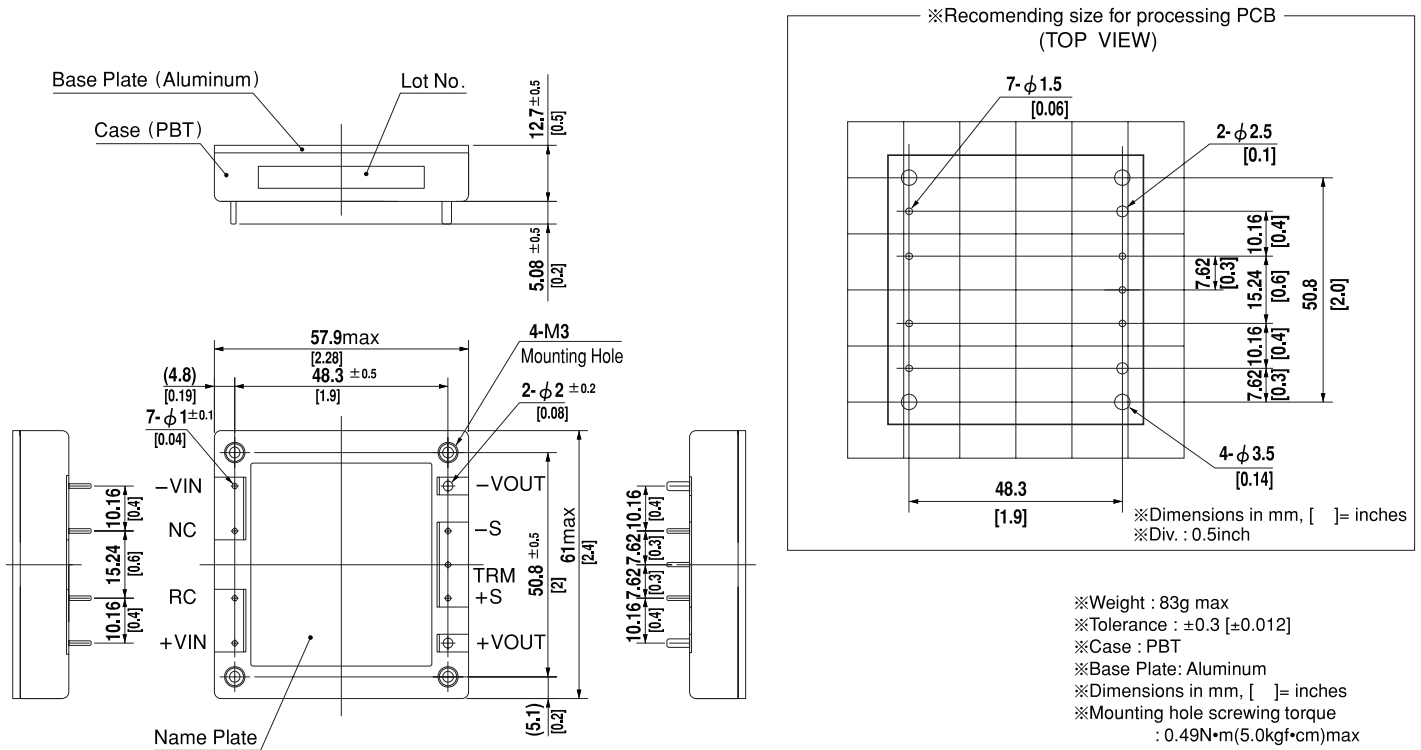
MODEL	CBS4504824	CBS4504828	CBS4504832
MAX OUTPUT WATTAGE[W]	456	448	400
DC OUTPUT	24V 19A	28V 16A	32V 12.5A

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	
START-UP TIME[ms]	200max (DCIN 48V, Io=100%)				
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed (TRM pin open), adjustable by external resistor				
OUTPUT VOLTAGE SETTING[V]	*4 19.2 - 26.0	16.8 - 32.2	25.6 - 35.2		
	*4 23.52 - 24.48	27.44 - 28.56	31.36 - 32.64		
OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically				
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)				
ISOLATION	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)			
ENVIRONMENT	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 ² (5G), 3minutes period, 60minutes each along X, Y and Z axis			
	IMPACT	196.1m/s ² (20G), 11ms, once each along X, Y and Z axis			
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1			
OTHERS	CASE SIZE/WEIGHT	57.9 x 12.7 x 61.0mm [2.28 x 0.5 x 2.4 inches] (W x H x 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 & 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



Specifications are subject to change without notice. It is responsibility of each customer to thoroughly test each product and part number under their unique parameters and environments to ensure a product will work properly and reliably.