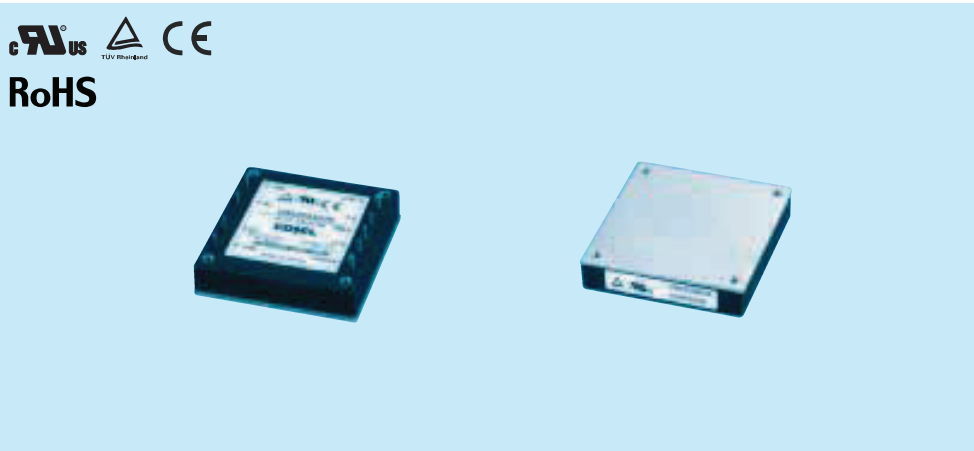


COSEL DC-DC Converters Power Module type
CBS350

Ordering information
CB S 350 48 12 - □



RoHS

- 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 ϕ 3.4 thru

MODEL	CBS3502412	CBS3502424	CBS3502428	CBS3502432	CBS3502448	CBS3504812	CBS3504824	CBS3504828	CBS3504832	CBS3504848
MAX OUTPUT WATTAGE[W]	300	348	350	352	302	348	348	350	352	350
DC OUTPUT	12V 25A	24V 14.5A	28V 12.5A	32V 11A	48V 6.3A	12V 29A	24V 14.5A	28V 12.5A	32V 11A	48V 7.3A

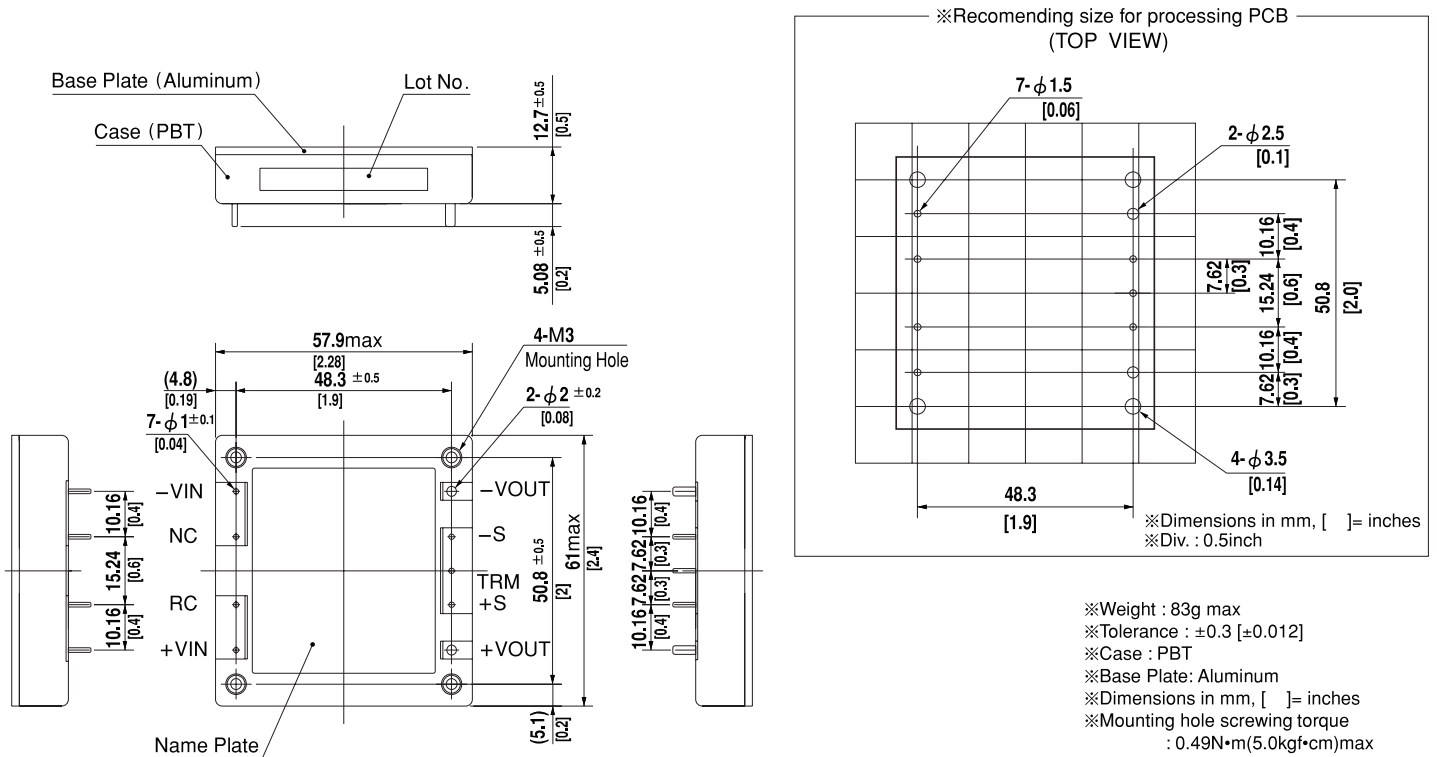
SPECIFICATIONS

	MODEL	CBS3502412	CBS3502424	CBS3502428	CBS3502432	CBS3502448	CBS3504812	CBS3504824	CBS3504828	CBS3504832	CBS3504848	
INPUT	VOLTAGE[V]	DC20 - 36					DC36 - 76					DC36 - 60
	CURRENT[A]	*1 14.5typ	16.7typ	16.4typ	16.5typ	14.0typ	8.33typ	8.15typ	8.10typ	8.15typ	8.15typ	
	EFFICIENCY[%]	*1 86typ	87typ	89typ	89typ	90typ	87typ	89typ	90typ	90typ	91typ	
	VOLTAGE[V]	12	24	28	32	48	12	24	28	32	48	
OUTPUT	CURRENT[A]	25	14.5	12.5	11	6.3	29	14.5	12.5	11	7.3	
	LINE REGULATION[mV]	24max	48max	56max	64max	96max	24max	48max	56max	64max	96max	
	LOAD REGULATION[mV]	24max	48max	56max	64max	96max	24max	48max	56max	64max	96max	
	RIPPLE[mVp-p]	-20 to +100°C *2	120max	150max	180max	180max	300max	120max	150max	180max	180max	300max
		-40 to -20°C *2	150max	180max	220max	220max	360max	150max	180max	220max	220max	360max
		0 to 15%Load *2	240max	300max	360max	360max	600max	240max	300max	360max	360max	600max
	RIPPLE NOISE[mVp-p]	-20 to +100°C *2	150max	180max	220max	220max	360max	150max	180max	220max	220max	360max
		-40 to -20°C *2	200max	250max	280max	280max	500max	200max	250max	280max	280max	500max
		0 to 15%Load *2	300max	360max	440max	440max	720max	300max	360max	440max	440max	720max
	TEMPERATURE REGULATION[mV]	0 to +65°C	120max	240max	280max	320max	480max	120max	240max	280max	320max	480max
		-40 to +100°C	240max	480max	560max	640max	960max	240max	480max	560max	640max	960max
	DRIFT[mV]	*3 40max	90max	90max	120max	180max	40max	90max	90max	120max	180max	
	START-UP TIME[ms]	200max (DCIN 24V, Io=100%)					200max (DCIN 48V, Io=100%)					
	OUTPUT VOLTAGE ADJUSTMENT RANGE[V] *4	Fixed (TRM pin open), adjustable by external resistor										
OUTPUT VOLTAGE SETTING[V] *1	7.2 - 13.2	14.4 - 26.4	16.8 - 30.8	25.6 - 35.2	38.4 - 52.8	7.2 - 13.2	14.4 - 26.4	16.8 - 30.8	25.6 - 35.2	38.4 - 55.2		
OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically											
OVERVOLTAGE PROTECTION[V]	13.80 - 16.80	27.60 - 33.60	32.20 - 39.20	36.80 - 44.80	57.50 - 63.00	13.80 - 16.80	27.60 - 33.60	32.20 - 39.20	36.80 - 44.80	57.50 - 63.00		
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 50M Ω min(20 \pm 15°C)										
	INPUT-BASE PLATE	DC1.500V or AC1.000V 1minute, Cutoff current = 10mA, DC500V 50M Ω min(20 \pm 15°C)										
	OUTPUT-BASE PLATE	AC500V 1minute, Cutoff current = 100mA, DC500V 50M Ω min (20 \pm 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(DC24V,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 0.1 μ F. 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 When the input voltage is in the range of DC20 - 22V, DC36 - 40V, output voltage is limited. Refer to the manual.

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External view



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