

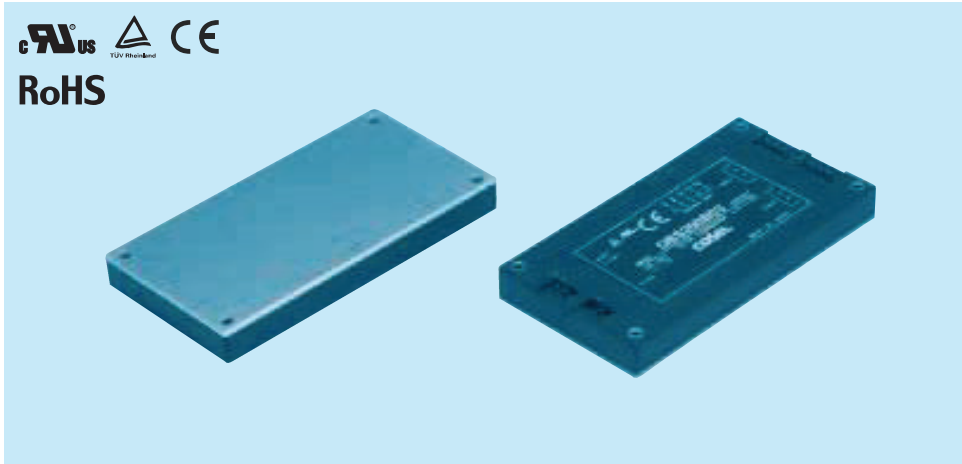
**COSEL** DC-DC Converters Power Module type

# DBS200B

Ordering information

**DB S 200 B 03**

① ② ③ ④ ⑤



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage
- B :DC200 - 400V
- ⑤ Output voltage

MODEL	DBS200B03	DBS200B05	DBS200B07	DBS200B12
MAX OUTPUT WATTAGE[W]	165	200	210	240
DC OUTPUT	3.3V 50A	5V 40A	7.5V 28A	12V 20A

## SPECIFICATIONS

	MODEL	DBS200B03	DBS200B05	DBS200B07	DBS200B12	
INPUT	VOLTAGE[V]	DC200 - 400				
	CURRENT[A]	*1 0.75typ	0.86typ	0.87typ	0.99typ	
	EFFICIENCY[%]	*1 79typ	83typ	86typ	87typ	
OUTPUT	VOLTAGE[V]	3.3	5	7.5	12	
	CURRENT[A]	50	40	28	20	
	LINE REGULATION[mV]	16max	20max	30max	40max	
	LOAD REGULATION[mV]	30max	40max	60max	100max	
	RIPPLE[mVp-p]	0 to +85°C *2	80max	80max	100max	120max
		-20 - 0°C *2	140max	140max	150max	160max
	RIPPLE NOISE[mVp-p]	0 to +85°C *2	100max	100max	140max	150max
		-20 - 0°C *2	150max	150max	160max	180max
	TEMPERATURE REGULATION[mV]	0 to +65°C	35max	50max	75max	120max
		-20 to +85°C	60max	85max	130max	200max
DRIFT[mV]	*3 16max	20max	30max	40max		
START-UP TIME[ms]	200max (DCIN 280V, Io=100%)					
OUTPUT VOLTAGE ADJUSTMENT RANGE	Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage					
OUTPUT VOLTAGE SETTING[V]	3.25 - 3.45	4.90 - 5.20	7.25 - 7.85	11.60 - 12.60		
PROTECTION CIRCUIT AND OTHERS	OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically				
	OVERVOLTAGE PROTECTION	4.00 - 5.50V	5.75 - 7.00V	8.60 - 10.50V	13.80 - 16.80V	
	REMOTE SENSING	Provided				
	REMOTE ON/OFF	Provided (On both side of input and output)				
ISOLATION	INPUT-OUTPUT	AC3.000V 1minute. Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)				
	INPUT-FG	AC2.000V 1minute. Cutoff current = 10mA, DC500V 50MΩ min (20±15°C)				
	OUTPUT-FG	AC500V 1minute. Cutoff current = 100mA, DC500V 50MΩ min (20±15°C)				
	OUTPUT-RC2.RC3	AC100V 1minute. Cutoff current = 100mA, DC100V 10MΩ min (20±15°C)				
ENVIRONMENT	OPERATING TEMP.,HUMID.AND ALTITUDE *4	-20 to +85°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 +85°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				
	IMPACT	196.1m/s <sup>2</sup> (20G), 11ms once each along X, Y and Z axis				
SAFETY	AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1, EN50178 Complies with DEN-AN and IEC60950-1				
OTHERS	CASE SIZE/WEIGHT	61 x 12.7 x 116.8mm [2.4 x 0.5 x 4.6 inches] (W x H x D) / 150g max				
	COOLING METHOD	Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)				

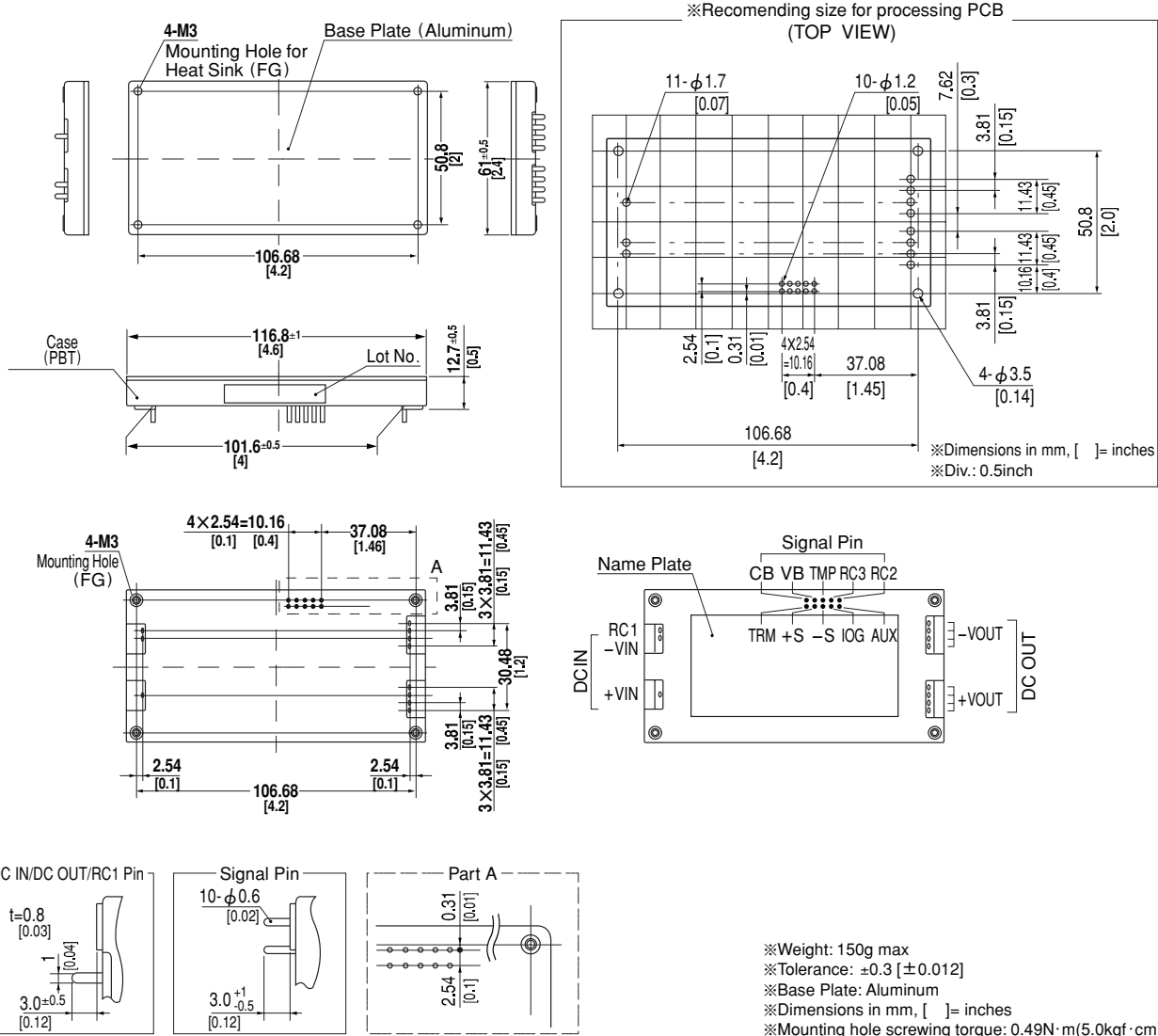
\*1 At rated input(DC280V) and rated load.

\*2 Ripple and ripple noise is measured by using measuring board with the recommended capacitor Co & the film capacitor 0.1μF. Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:RM101). 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.

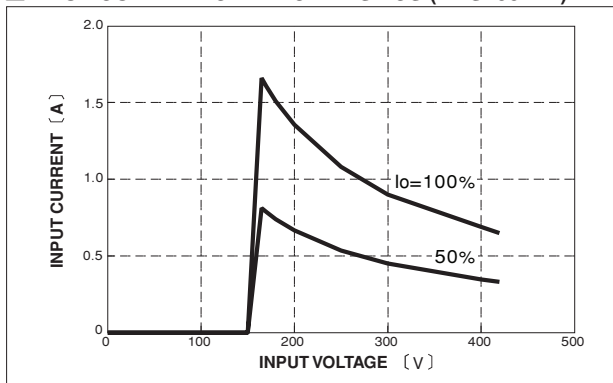
\*4 Please consult us in regard to use from -40°C.

External view

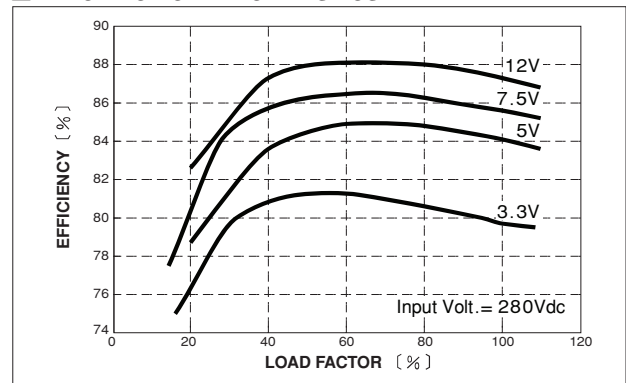


Performance data

INPUT CURRENT CHARACTERISTICS (DBS200B12)



EFFICIENCY CHARACTERISTICS



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.