

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

# CDS40048

**Ordering information**

CD
S
400
48
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**RoHS**

- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage
- 48:DC36 - 76V
- ⑤ Output voltage
- ⑥ Optional
- M:with Mounting hole
- M3 tapped

MODEL	CDS4004802	CDS4004803	CDS4004805	CDS4004807	CDS4004812	CDS4004815	CDS4004824	CDS4004828
MAX OUTPUT WATTAGE[W]	200	330	400	405	500	510	504	504
DC OUTPUT	2V 100A	3.3V 100A	5V 80A	7.5V 54A	12.5V 40A	15V 34A	24V 21A	28V 18A

**SPECIFICATIONS**

	MODEL	CDS4004802	CDS4004803	CDS4004805	CDS4004807	CDS4004812	CDS4004815	CDS4004824	CDS4004828	
INPUT	VOLTAGE[V]	DC36 - 76								
	CURRENT[A]	6typ	9typ	10typ	10typ	12typ	12typ	12typ	12typ	
	EFFICIENCY[%]	DCIN 48V, Io=100%	73typ	80typ	84typ	87typ	89typ	89typ	89typ	89typ
		DCIN 48V, Io=50%	75typ	82typ	86typ	88typ	91typ	90typ	90typ	90typ
OUTPUT	VOLTAGE[V]	2	3.3	5	7.5	12.5	15	24	28	
	CURRENT[A]	100	100	80	54	40	34	21	18	
	LINE REGULATION[mV]	10max	16max	20max	30max	40max	60max	95max	95max	
	LOAD REGULATION[mV]	20max	30max	40max	60max	100max	150max	190max	190max	
	RIPPLE[mVp-p]	0 to +85°C	80max	80max	80max	100max	120max	120max	120max	120max
		-20 - 0°C	140max	140max	140max	150max	160max	160max	160max	160max
	RIPPLE NOISE[mVp-p]	0 to +85°C	100max	100max	100max	140max	150max	150max	150max	150max
		-20 - 0°C	150max	150max	150max	160max	180max	180max	180max	180max
	TEMPERATURE REGULATION[mV]	0 to +65°C	25max	35max	50max	75max	120max	180max	280max	280max
		-20 to +85°C	40max	60max	85max	130max	200max	310max	480max	480max
DRIFT[mV]	10max	16max	20max	30max	40max	60max	90max	90max		
START-UP TIME[ms]	200max (DCIN 48V, Io=100%)									
OUTPUT VOLTAGE ADJUSTMENT RANGE[V]	Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage									
OUTPUT VOLTAGE SETTING[V]	1.0 - 2.2	1.98 - 3.63	3.0 - 5.5	4.50 - 8.25	7.50 - 13.75	9.0 - 16.5	14.4 - 26.4	16.8 - 32.0	16.8 - 32.0	
OVERCURRENT PROTECTION	Works over 105% of rating and recovers automatically									
OVERVOLTAGE PROTECTION[V]	2.80 - 4.50	4.00 - 5.50	5.75 - 7.00	8.60 - 10.50	14.35 - 17.50	17.25 - 21.00	27.60 - 33.60	33.00 - 39.20	33.00 - 39.20	
REMOTE SENSING	Provided									
REMOTE ON/OFF	Provided (On both side of input and output)									
INPUT-OUTPUT	DC1500V 1minute, DC500V 50MΩ min (20±15°C)									
INPUT-FG	DC1500V 1minute, 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)									
OPERATING TEMP.,HUMID.AND ALTITUDE	-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 X, Y and Z axis									
AGENCY APPROVALS	UL60950-1, C-UL, EN60950-1									
CASE SIZE/WEIGHT	61 x 12.7 x 116.8mm [2.4 x 0.5 x 4.6 inches] (W x H x D) / 180g max									
COOLING METHOD	Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)									

\*1 At rated input(DC48V) and rated load.

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

Measured by 20MHz oscilloscope or Ripple-Noise meter (Equivalent to KEISOKU-GIKEN:RM101).

\*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 using with in the range of 1-1.2V, please consult with us.

\*5 CDS4004828 : Output voltage adjustment range is 60 - 114.3%.

\*6 Please consult us in regard to use from -40°C.

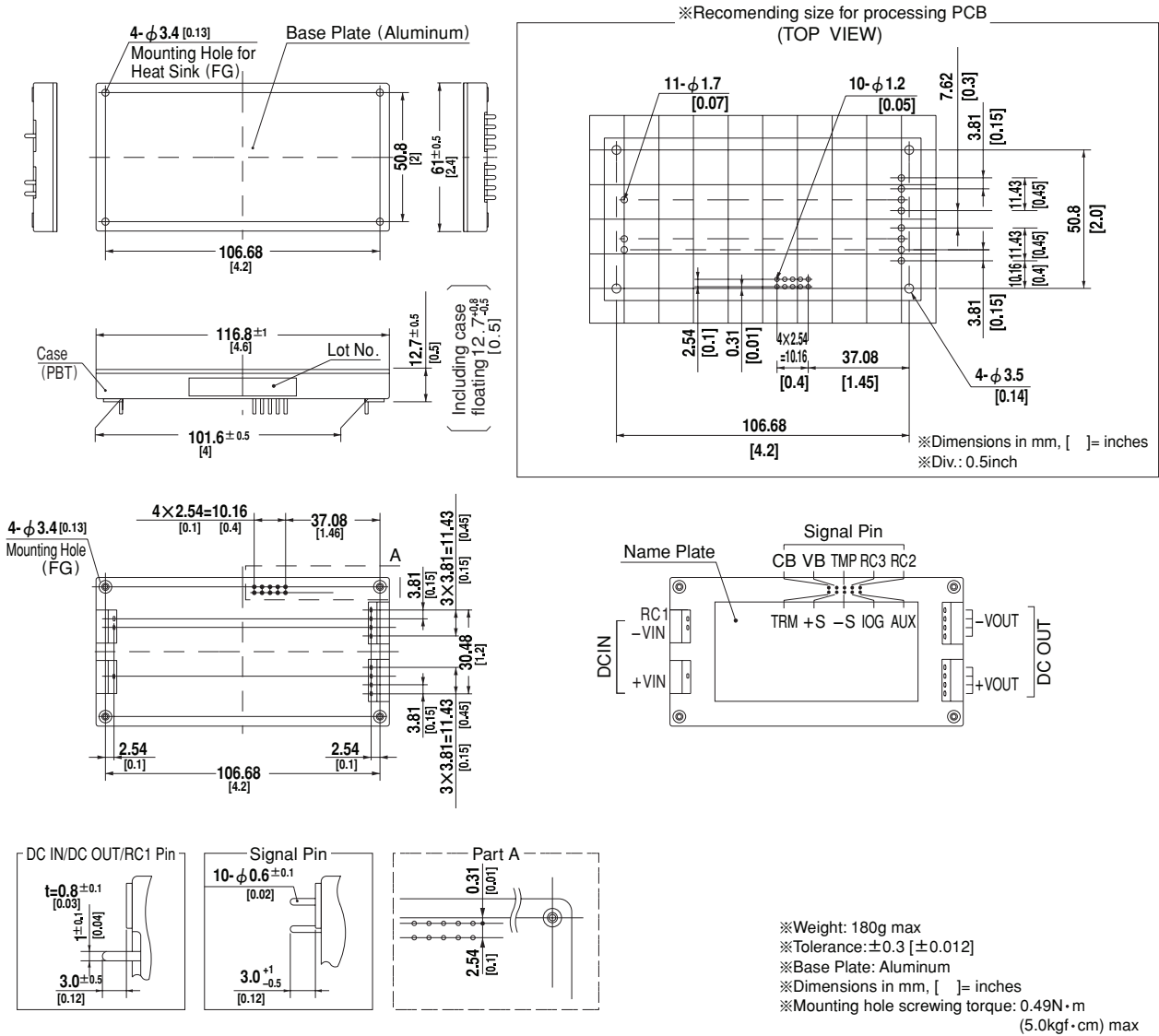
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Click below for more details, to buy on-line or request volume pricing:

<http://power.sager.com/cosel-CDS400-dc-dc-converter.html>

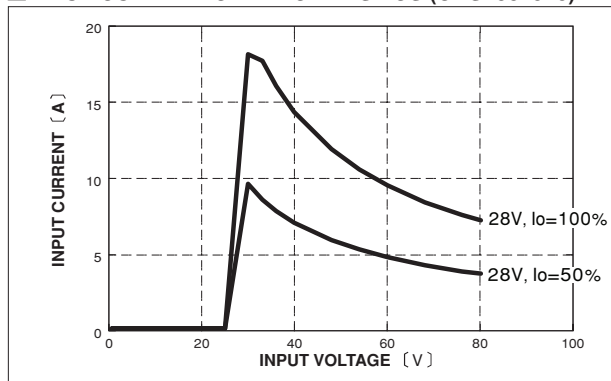
**(866) 588-1750**  
 power@sager.com  
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External view

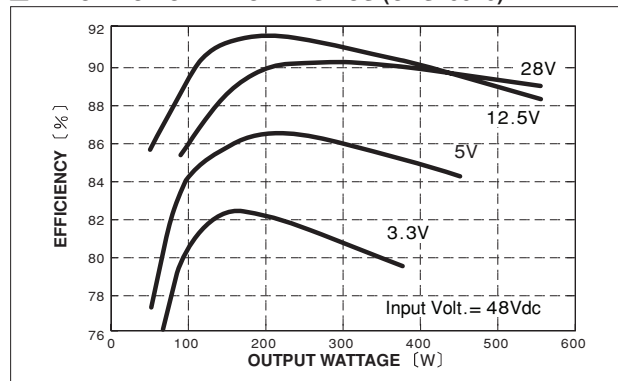


Performance data

INPUT CURRENT CHARACTERISTICS (CDS4004828)



EFFICIENCY CHARACTERISTICS (CDS40048)



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