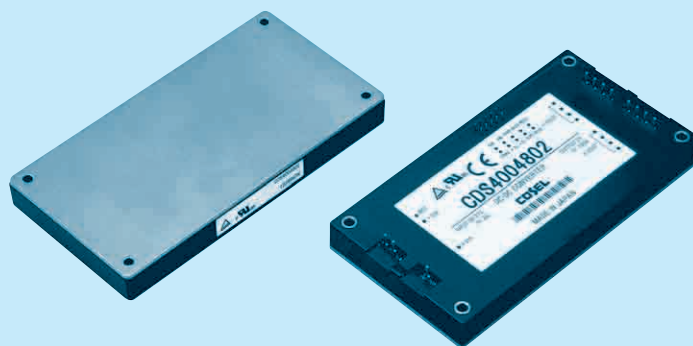


## CDS40048

CD S 400 48 12 - □

① ② ③ ④ ⑤ ⑥



- 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]                              | *1 6typ                                                                                                               | 9typ        | 10typ       | 10typ        | 12typ         | 12typ         | 12typ         | 12typ          |
|                               | EFFICIENCY[%]                           | DCIN 48V, I <sub>o</sub> =100% 73typ                                                                                  | 80typ       | 84typ       | 87typ        | 89typ         | 89typ         | 89typ         | 89typ          |
|                               |                                         | DCIN 48V, I <sub>o</sub> =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 *2 80max                                                                                                   | 80max       | 80max       | 100max       | 120max        | 120max        | 120max        | 120max         |
|                               |                                         | -20 - 0°C *2 140max                                                                                                   | 140max      | 140max      | 150max       | 160max        | 160max        | 160max        | 160max         |
|                               | RIPPLE NOISE[mVp-p]                     | 0 to +85°C *2 100max                                                                                                  | 100max      | 100max      | 140max       | 150max        | 150max        | 150max        | 150max         |
|                               |                                         | -20 - 0°C *2 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]                               | *3 10max                                                                                                              | 16max       | 20max       | 30max        | 40max         | 60max         | 90max         | 90max          |
|                               | START-UP TIME[ms]                       | 200max (DCIN 48V, I <sub>o</sub> =100%)                                                                               |             |             |              |               |               |               |                |
| PROTECTION CIRCUIT AND OTHERS | OUTPUT VOLTAGE ADJUSTMENT RANGE[V]      | Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage                                         |             |             |              |               |               |               |                |
|                               |                                         | 1.0 - 2.2 *4                                                                                                          | 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 *5 |
|                               | OUTPUT VOLTAGE SETTING[V]               | 1.95 - 2.10                                                                                                           | 3.25 - 3.45 | 4.90 - 5.20 | 7.25 - 7.85  | 12.00 - 13.00 | 14.40 - 15.60 | 23.04 - 24.96 | 26.88 - 29.12  |
|                               | OVERCURRENT PROTECTION                  | Works over 105% of rating and recovers automatically                                                                  |             |             |              |               |               |               |                |
| ISOLATION                     | 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  |
|                               | REMOTE SENSING                          | Provided                                                                                                              |             |             |              |               |               |               |                |
|                               | REMOTE ON/OFF                           | Provided (On both side of input and output)                                                                           |             |             |              |               |               |               |                |
|                               | INPUT-OUTPUT                            | DC1500V 1minute, DC500V 50MΩ min (20±15°C)                                                                            |             |             |              |               |               |               |                |
| ENVIRONMENT                   | 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 *6 | -20 to +85°C (On aluminum base plate), 20 - 95%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max |             |             |              |               |               |               |                |
| SAFETY                        | 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                                                                                            |             |             |              |               |               |               |                |
| OTHERS                        | CASE SIZE/WEIGHT                        | 61 × 12.7 × 116.8mm [2.4 × 0.5 × 4.6 inches] (W × H × 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).

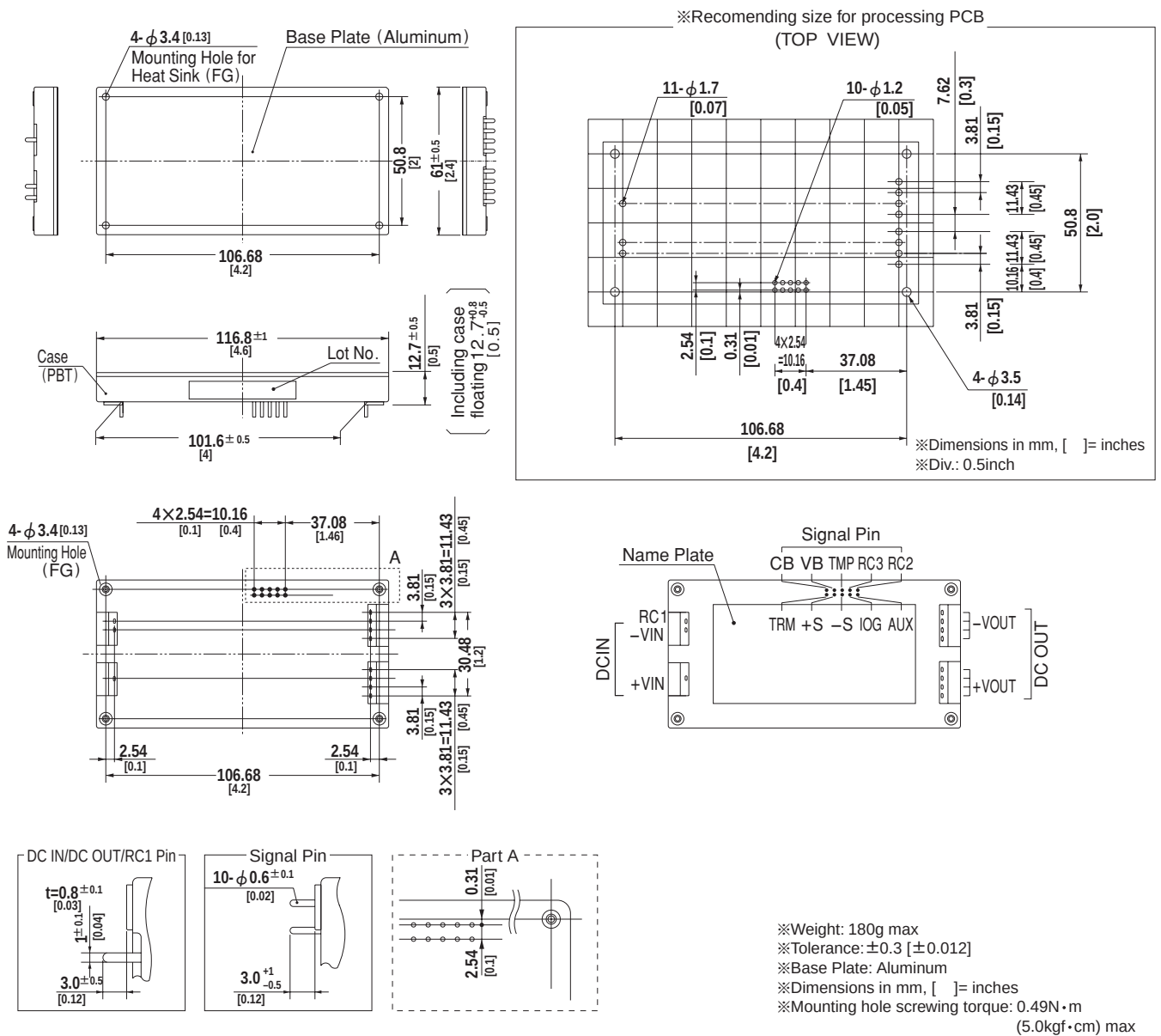
\*3 Drift is the change in DC output for an eight hour period after a half-hour warm-up at 25°C, with the input voltage held constant at the rated input/output.

\*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%.

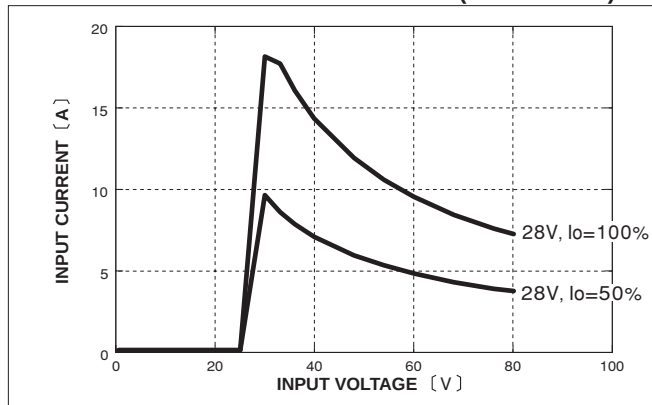
\*6 Please consult us in regard to use from -40°C.

## External view

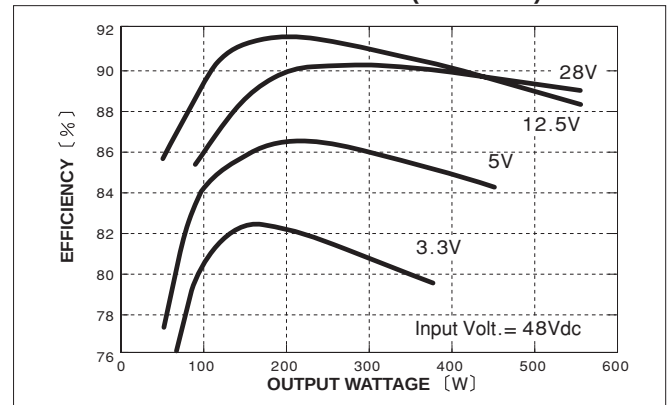


## Performance data

## ■ INPUT CURRENT CHARACTERISTICS (CDS4004828)



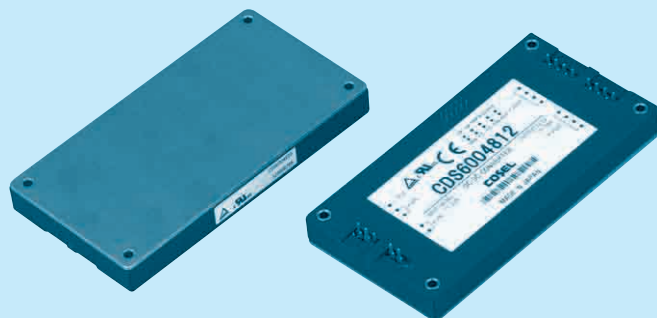
## ■ EFFICIENCY CHARACTERISTICS (CDS40048)



## CDS500/600

CD S 600 48 12 ☐ - ☐

① ② ③ ④ ⑤ ⑥ ⑦



- ① Series name  
 ② Single output  
 ③ Output wattage  
 ④ Input voltage  
 24:DC18 - 36V  
 48:DC36 - 76V  
 ⑤ Output voltage  
 ⑥ H: High Efficiency  
 (24VIN Model only)  
 ⑦ Optional  
 M: with Mounting hole  
 M3 tapped

| MODEL                 | CDS5002428H | CDS6002412 | CDS6002412H | CDS6002428 | CDS6002428H | CDS6004812 | CDS6004828 |
|-----------------------|-------------|------------|-------------|------------|-------------|------------|------------|
| MAX OUTPUT WATTAGE[W] | 504         | 600        | 600         | 616        | 616         | 700        | 700        |
| DC OUTPUT             | 28V 18A     | 12.5V 48A  | 12.5V 48A   | 28V 22A    | 28V 22A     | 12.5V 56A  | 28V 25A    |

## SPECIFICATIONS

|                                     | MODEL                              |               | CDS5002428H                                                                                                          | CDS6002412      | CDS6002412H     | CDS6002428      | CDS6002428H     | CDS6004812      | CDS6004828                  |  |
|-------------------------------------|------------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------------------|--|
| INPUT                               | VOLTAGE[V]                         |               | DC18 - 36                                                                                                            |                 | DC20.5 - 36     | DC18 - 36       | DC19 - 36       | DC36 - 76       |                             |  |
|                                     | CURRENT[A]                         |               | 24typ                                                                                                                | 30typ           | 29typ           | 30typ           | 29typ           | 17typ           | 17typ                       |  |
|                                     | EFFICIENCY[%]                      | Io=100%       | 89typ(DCIN 24V)                                                                                                      | 83typ(DCIN 24V) | 87typ(DCIN 24V) | 86typ(DCIN 24V) | 89typ(DCIN 24V) | 89typ(DCIN 48V) | 89typ(DCIN 48V)             |  |
|                                     |                                    | Io=50%        | 90typ(DCIN 24V)                                                                                                      | 87typ(DCIN 24V) | 90typ(DCIN 24V) | 87typ(DCIN 24V) | 90typ(DCIN 24V) | 91typ(DCIN 48V) | 90typ(DCIN 48V)             |  |
| OUTPUT                              | VOLTAGE[V]                         |               | 28                                                                                                                   | 12.5            | 12.5            | 28              | 28              | 12.5            | 28                          |  |
|                                     | CURRENT[A]                         |               | 18                                                                                                                   | 48              | 48              | 22              | 22              | 56              | 25                          |  |
|                                     | LINE REGULATION[mV]                |               | 95max                                                                                                                | 40max           | 40max           | 95max           | 95max           | 40max           | 95max                       |  |
|                                     | LOAD REGULATION[mV]                |               | 190max                                                                                                               | 100max          | 100max          | 190max          | 190max          | 100max          | 190max                      |  |
|                                     | RIPPLE[mVp-p]                      | 0 to +85℃     | 120max                                                                                                               | 120max          | 120max          | 120max          | 120max          | 120max          | 120max                      |  |
|                                     |                                    | -20 - 0℃      | 160max                                                                                                               | 160max          | 160max          | 160max          | 160max          | 160max          | 160max                      |  |
|                                     | RIPPLE NOISE[mVp-p]                | 0 to +85℃     | 150max                                                                                                               | 150max          | 150max          | 150max          | 150max          | 150max          | 150max                      |  |
|                                     |                                    | -20 - 0℃      | 180max                                                                                                               | 180max          | 180max          | 180max          | 180max          | 180max          | 180max                      |  |
|                                     | TEMPERATURE REGULATION[mV]         | 0 to +65℃     | 280max                                                                                                               | 120max          | 120max          | 280max          | 280max          | 120max          | 280max                      |  |
|                                     |                                    | -20 to +85℃   | 480max                                                                                                               | 200max          | 200max          | 480max          | 480max          | 200max          | 480max                      |  |
|                                     | DRIFT[mV]                          |               | 90max                                                                                                                | 40max           | 40max           | 90max           | 90max           | 40max           | 90max                       |  |
|                                     | START-UP TIME[ms]                  |               | 200max (DCIN 24V, Io=100%)                                                                                           |                 |                 |                 |                 |                 | 200max (DCIN 48V, Io=100%)  |  |
|                                     | OUTPUT VOLTAGE ADJUSTMENT RANGE[V] |               | Fixed (TRM pin open), 80 - 110% adjustable by external VR or external voltage                                        |                 |                 |                 |                 |                 |                             |  |
|                                     |                                    | 22.40 - 32.00 | 10.00 - 13.75                                                                                                        | 10.00 - 13.75   | 22.40 - 30.80   | 22.40 - 32.00   | 10.00 - 13.75   | 22.40 - 32.00   |                             |  |
| OUTPUT VOLTAGE SETTING[V]           |                                    | 27.72 - 28.28 | 12.00 - 13.00                                                                                                        | 12.00 - 13.00   | 26.88 - 29.12   | 26.88 - 29.12   | 12.00 - 13.00   | 26.88 - 29.12   |                             |  |
| PROTECTION<br>CIRCUIT AND<br>OTHERS | OVERCURRENT PROTECTION             |               | Works over 105% of rating and recovers automatically                                                                 |                 |                 |                 |                 |                 |                             |  |
|                                     | OVERVOLTAGE PROTECTION[V]          |               | 33.00 - 39.20                                                                                                        | 14.35 - 17.50   |                 |                 | 33.00 - 39.20   |                 | 14.35 - 17.50 33.00 - 39.20 |  |
|                                     | REMOTE SENSING                     |               | Provided                                                                                                             |                 |                 |                 |                 |                 |                             |  |
|                                     | REMOTE ON/OFF                      |               | Provided (On both side of input and output)                                                                          |                 |                 |                 |                 |                 |                             |  |
| ISOLATION                           | INPUT-OUTPUT                       |               | AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)                                                      |                 |                 |                 |                 |                 |                             |  |
|                                     | INPUT-FG                           |               | AC500V 1minute, Cutoff current = 10mA, DC500V 50MΩ min (20±15℃)                                                      |                 |                 |                 |                 |                 |                             |  |
|                                     | OUTPUT-FG                          |               | AC500V 1minute, Cutoff current = 100mA, DC500V 50MΩ min (20±15℃)                                                     |                 |                 |                 |                 |                 |                             |  |
|                                     | OUTPUT-RC2,RC3                     |               | AC100V 1minute, Cutoff current = 100mA, DC100V 10MΩ min (20±15℃)                                                     |                 |                 |                 |                 |                 |                             |  |
| ENVIRONMENT                         | OPERATING TEMP.,HUMID.AND ALTITUDE |               | -20 to +85℃ (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℃, 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                                                         |                 |                 |                 |                 |                 |                             |  |
| SAFETY                              | AGENCY APPROVALS                   |               | UL60950-1, C-UL, EN60950-1                                                                                           |                 |                 |                 |                 |                 |                             |  |
| OTHERS                              | CASE SIZE/WEIGHT                   |               | 61×12.7×116.8mm [2.4×0.5×4.6 inches] (W×H×D) / 200g max                                                              |                 |                 |                 |                 |                 |                             |  |
|                                     | COOLING METHOD                     |               | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink)                      |                 |                 |                 |                 |                 |                             |  |

\*1 At rated input(DC24,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.

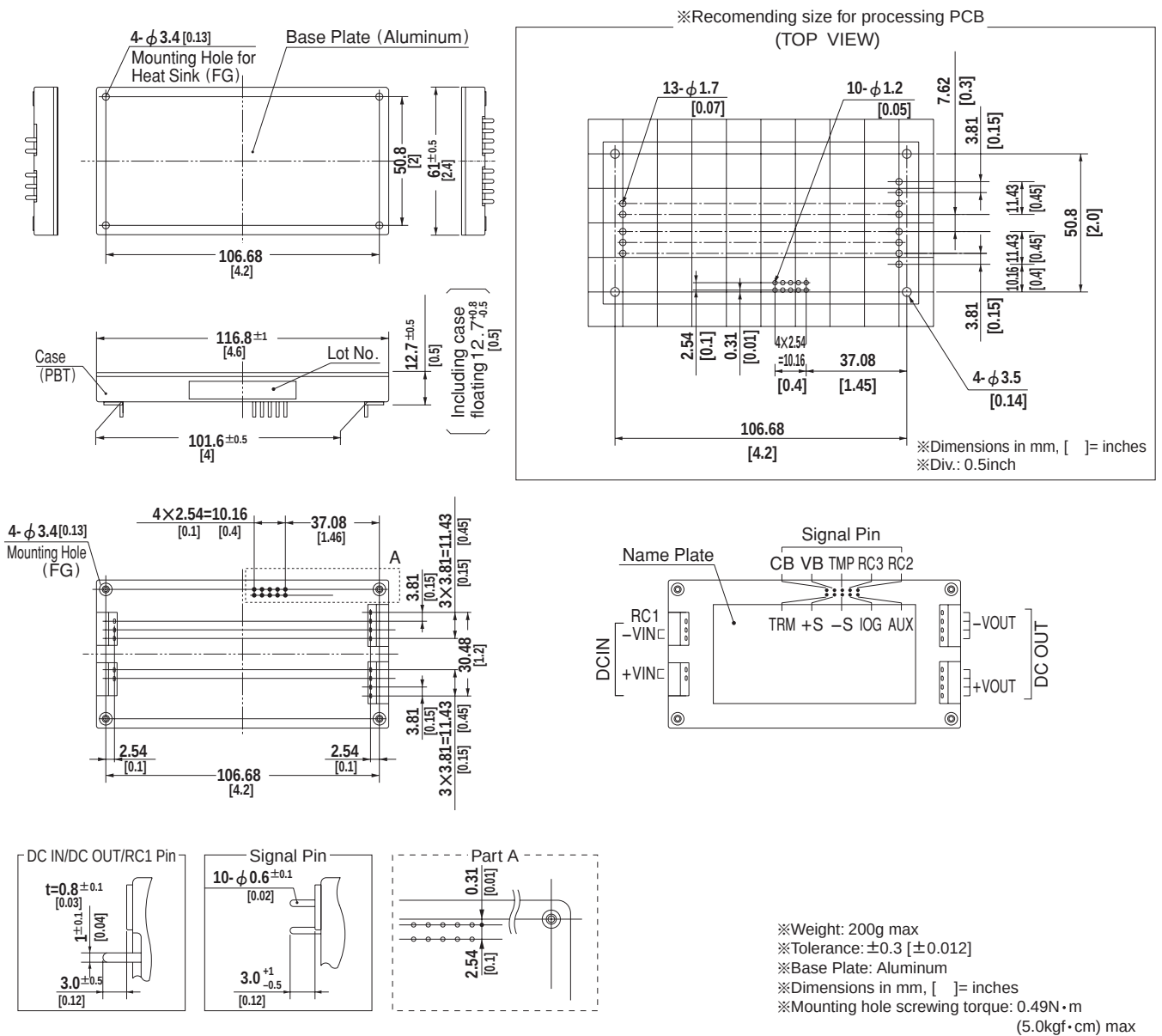
\*4 CDS5002428H, CDS6002428H, CDS6004828H: Output voltage adjustment range is 80 - 114.3%.

\*5 CDS5002428H, CDS6002412H, CDS6002428H: When the output voltage adjustment range is 101% or more, the input voltage range is limited (Refer to Instruction Manual).

\*6 Aluminum baseplate temperature Tc=25°C

\*7 Please consult us in regard to use from -40°C.

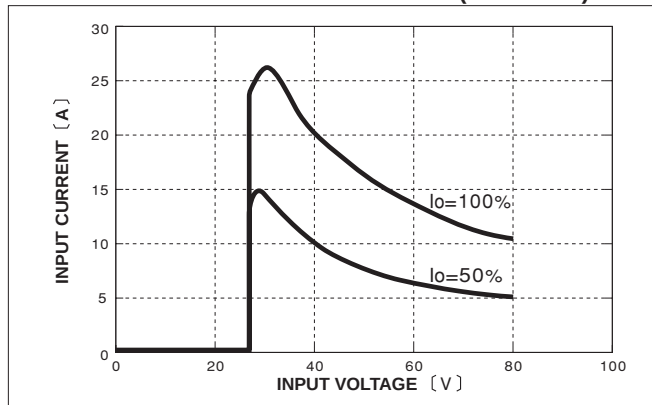
## External view



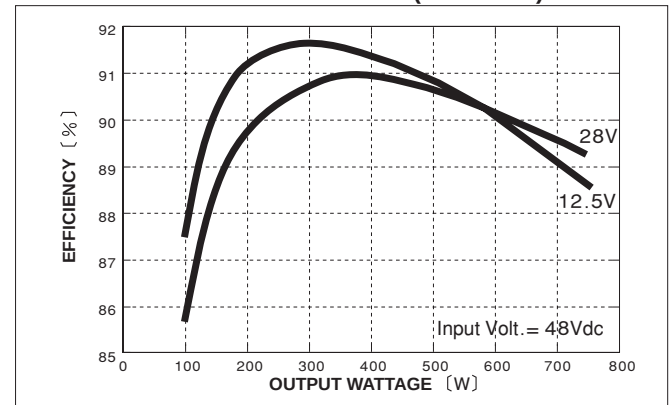
CDS

## Performance data

## INPUT CURRENT CHARACTERISTICS (CDS60048)



## EFFICIENCY CHARACTERISTICS (CDS60048)



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Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

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- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
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- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
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