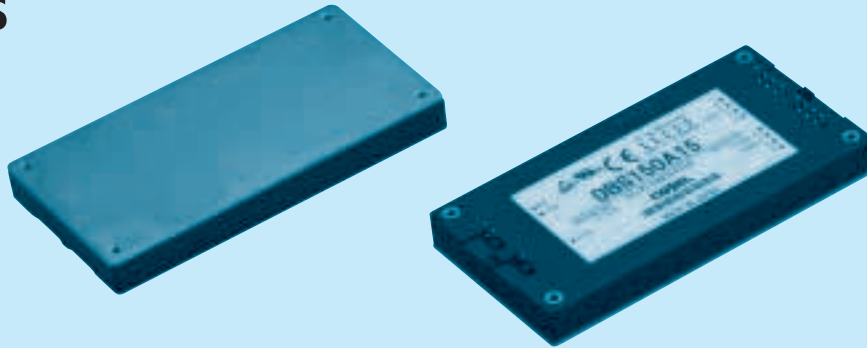


DBS100A/DBS150A

DB S 150 A 15

① ② ③ ④ ⑤



- ① Series name
- ② Single output
- ③ Output wattage
- ④ Input voltage
A :DC110V input
- ⑤ Output voltage

| MODEL | DBS100A05 | DBS100A13R8 | DBS150A12 | DBS150A15 | DBS150A24 |
|-----------------------|-----------|-------------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 100 | 100.7 | 150 | 150 | 151 |
| DC OUTPUT | 5V 20A | 13.8V 7.3A | 12V 12.5A | 15V 10A | 24V 6.3A |

SPECIFICATIONS

| | MODEL | DBS100A05 | DBS100A13R8 | DBS150A12 | DBS150A15 | DBS150A24 | |
|---------------------------------|---|---|----------------|----------------|----------------|-----------|--------|
| INPUT | VOLTAGE[V] | DC45 - 160 | | DC66 - 160 | | | |
| | CURRENT[A] | *1 1.11typ | 1.10typ | 1.57typ | 1.59typ | 1.58typ | |
| | EFFICIENCY[%] | *1 82typ | 83typ | 87typ | 86typ | 87typ | |
| OUTPUT | VOLTAGE[V] | 5 | 13.8 | 12 | 15 | 24 | |
| | CURRENT[A] | 20 | 7.3 | 12.5 | 10 | 6.3 | |
| | LINE REGULATION[mV] | 20max | 60max | 40max | 60max | 95max | |
| | LOAD REGULATION[mV] | 40max | 150max | 100max | 150max | 190max | |
| | RIPPLE[mVp-p] | 0 to +85°C *2 | 80max | 120max | 120max | 120max | 120max |
| | | -20 - 0°C *2 | 140max | 160max | 160max | 160max | 160max |
| | RIPPLE NOISE[mVp-p] | 0 to +85°C *2 | 100max | 150max | 150max | 150max | 150max |
| | | -20 - 0°C *2 | 150max | 180max | 180max | 180max | 180max |
| | TEMPERATURE REGULATION[mV] | 0 to +65°C | 50max | 180max | 120max | 180max | 280max |
| | | -20 to +85°C | 85max | 310max | 200max | 310max | 480max |
| DRIFT[mV] | *3 | 20max | 60max | 40max | 60max | 90max | |
| START-UP TIME[ms] | 200max (DCIN 110V, Io=100%) | | | | | | |
| OUTPUT VOLTAGE ADJUSTMENT RANGE | Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage | | | | | | |
| OUTPUT VOLTAGE SETTING[V] | 4.90 - 5.20 | 13.25 - 14.35 | 11.60 - 12.60 | 14.40 - 15.60 | 23.04 - 24.96 | | |
| OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | | | | | |
| OVERVOLTAGE PROTECTION | 5.75 - 7.00V | 15.87 - 19.32V | 13.80 - 16.80V | 17.25 - 21.00V | 27.60 - 33.60V | | |
| 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 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 | 61 × 12.7 × 116.8mm [2.4 × 0.5 × 4.6 inches] (W×H×D) / 150g max | | | | | |
| | COOLING METHOD | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink) | | | | | |

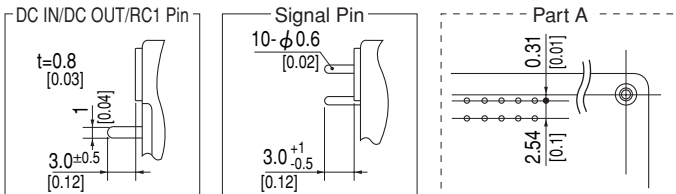
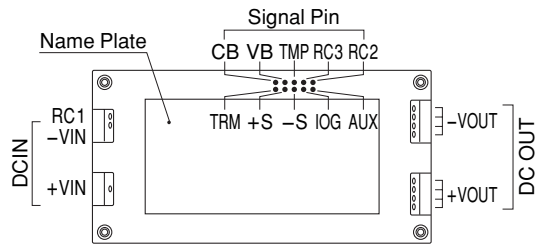
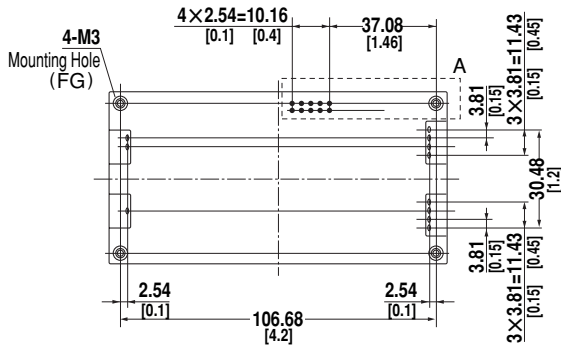
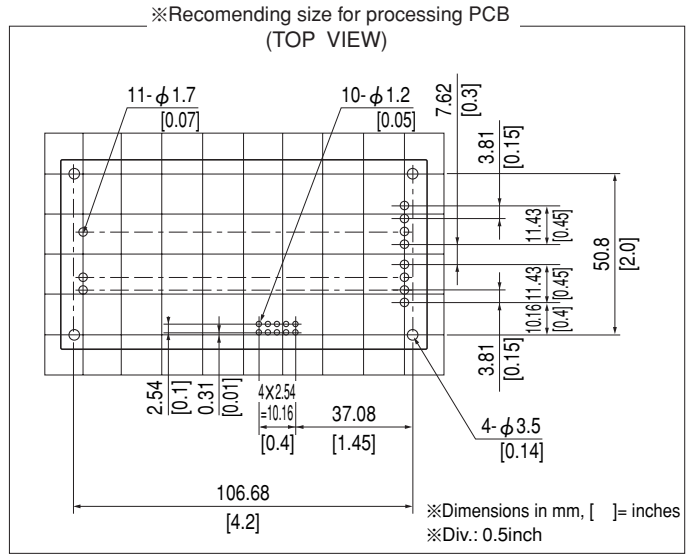
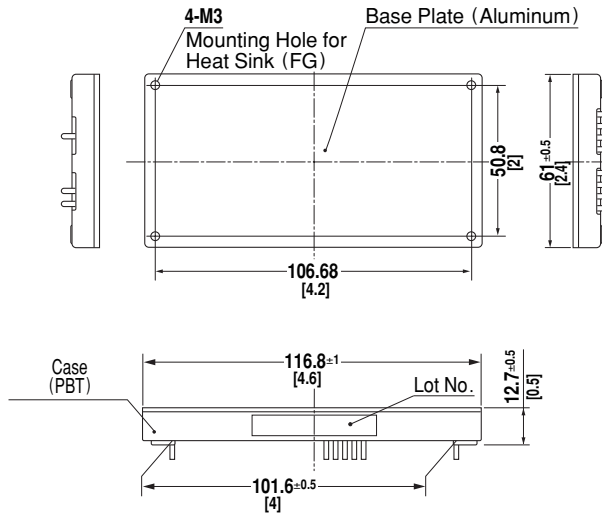
*1 At rated input(DC110V) and rated load.

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



- ※Weight: 150g max
- ※Tolerance: ±0.3 [±0.012]
- ※Base Plate: Aluminum
- ※Dimensions in mm, []= inches
- ※Mounting hole screwing torque: 0.49N·m(5.0kgf·cm)

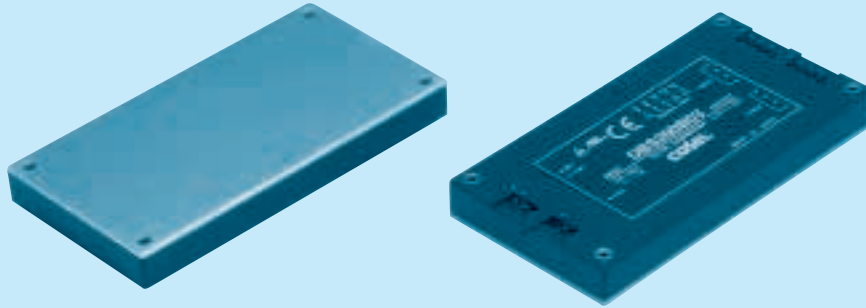
DBS200B

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 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, EN50178 Complies with DEN-AN and IEC60950-1 | | | | |
| OTHERS | CASE SIZE/WEIGHT | 61 × 12.7 × 116.8mm [2.4 × 0.5 × 4.6 inches] (W×H×D) / 150g max | | | | |
| | COOLING METHOD | Conduction cooling (e.g. heat radiation from the aluminum base plate to the attached heat sink) | | | | |

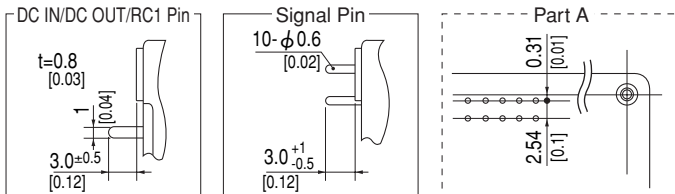
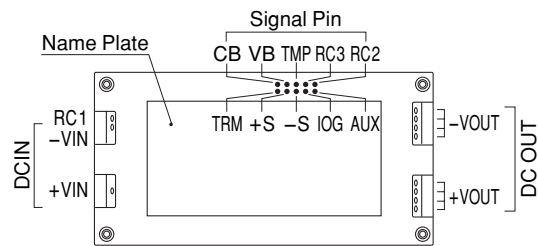
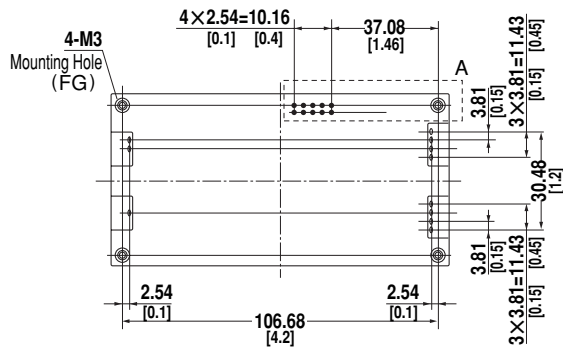
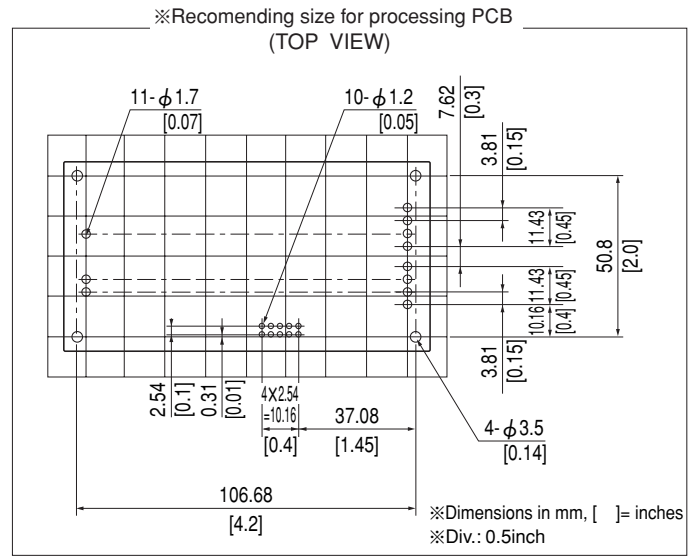
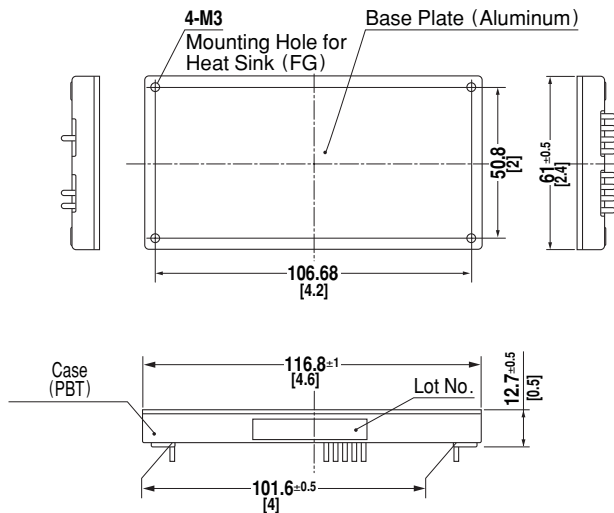
*1 At rated input(DC280V) and rated load.

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

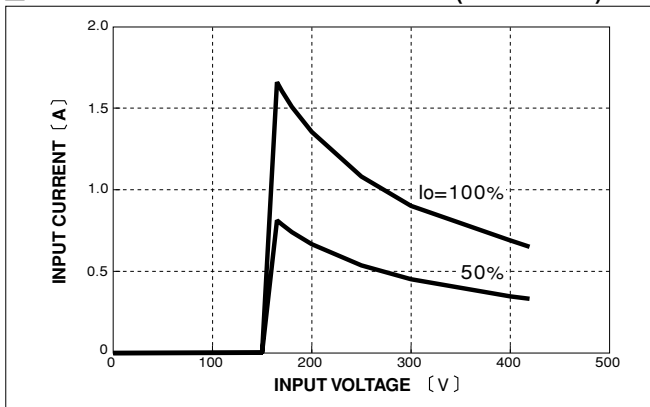
External view



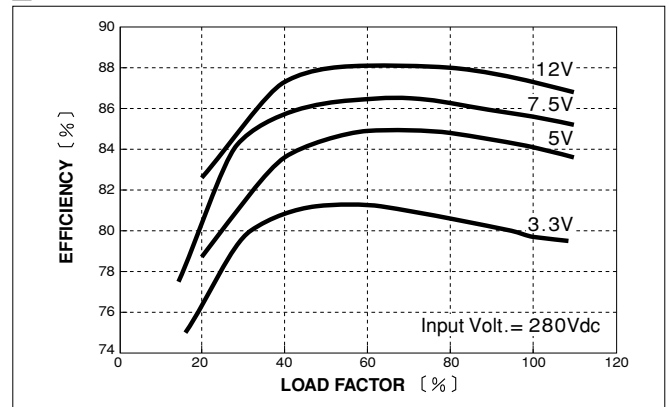
- ※Weight: 150g max
- ※Tolerance: ±0.3 [±0.012]
- ※Base Plate: Aluminum
- ※Dimensions in mm, [] = inches
- ※Mounting hole screwing torque: 0.49N·m(5.0kgf·cm)

Performance data

INPUT CURRENT CHARACTERISTICS (DBS200B12)



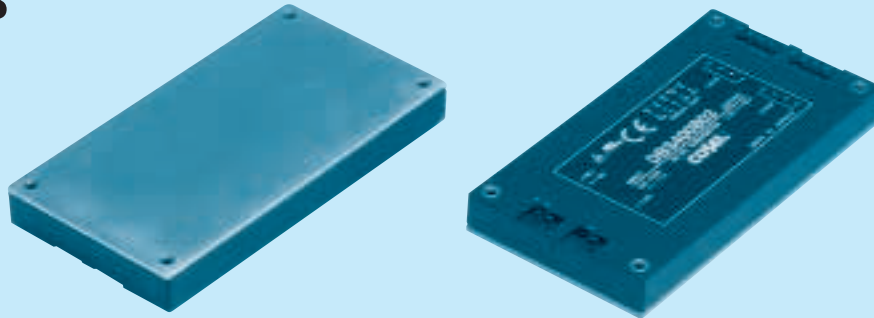
EFFICIENCY CHARACTERISTICS



DBS400B

DB S 400 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 | DBS400B03 | DBS400B05 | DBS400B07 | DBS400B12 | DBS400B15 | DBS400B18 | DBS400B24 | DBS400B28 |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 264 | 400 | 405 | 408 | 405 | 396 | 408 | 406 |
| DC OUTPUT | 3.3V 80A | 5V 80A | 7.5V 54A | 12V 34A | 15V 27A | 18V 22A | 24V 17A | 28V 14.5A |

SPECIFICATIONS

| | MODEL | DBS400B03 | DBS400B05 | DBS400B07 | DBS400B12 | DBS400B15 | DBS400B18 | DBS400B24 | DBS400B28 | |
|---------------------------------|---|---|---------------|----------------|----------------|----------------|----------------|----------------|-----------|--------|
| INPUT | VOLTAGE[V] | DC200 - 400 | | | | | | | | |
| | CURRENT[A] | *1 1.19typ | 1.72typ | 1.68typ | 1.67typ | 1.66typ | 1.61typ | 1.67typ | 1.63typ | |
| | EFFICIENCY[%] | *1 79typ | 83typ | 86typ | 87typ | 87typ | 89typ | 87typ | 88typ | |
| OUTPUT | VOLTAGE[V] | 3.3 | 5 | 7.5 | 12 | 15 | 18 | 24 | 28 | |
| | CURRENT[A] | 80 | 80 | 54 | 34 | 27 | 22 | 17 | 14.5 | |
| | LINE REGULATION[mV] | 16max | 20max | 30max | 40max | 60max | 60max | 95max | 95max | |
| | LOAD REGULATION[mV] | 30max | 40max | 60max | 100max | 150max | 150max | 190max | 190max | |
| | RIPPLE[mVp-p] | 0 to +85°C *2 | 80max | 80max | 100max | 120max | 120max | 120max | 120max | 120max |
| | | -20 - 0°C *2 | 140max | 140max | 150max | 160max | 160max | 160max | 160max | 160max |
| | RIPPLE NOISE[mVp-p] | 0 to +85°C *2 | 100max | 100max | 140max | 150max | 150max | 150max | 150max | 150max |
| | | -20 - 0°C *2 | 150max | 150max | 160max | 180max | 180max | 180max | 180max | 180max |
| | TEMPERATURE REGULATION[mV] | 0 to +65°C | 35max | 50max | 75max | 120max | 180max | 180max | 280max | 280max |
| | -20 to +85°C | 60max | 85max | 130max | 200max | 310max | 310max | 480max | 480max | |
| DRIFT[mV] | *3 | 16max | 20max | 30max | 40max | 60max | 60max | 90max | 90max | |
| START-UP TIME[ms] | 200max (DCIN 280V, I _o =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 | 14.40 - 15.60 | 17.28 - 18.72 | 23.04 - 24.96 | 26.88 - 29.12 | | |
| 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 | 17.25 - 21.00V | 20.70 - 25.20V | 27.60 - 33.60V | 32.20 - 39.20V | | |
| 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 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, EN50178 Complies with DEN-AN and IEC60950-1 | | | | | | | | |
| 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) | | | | | | | | |

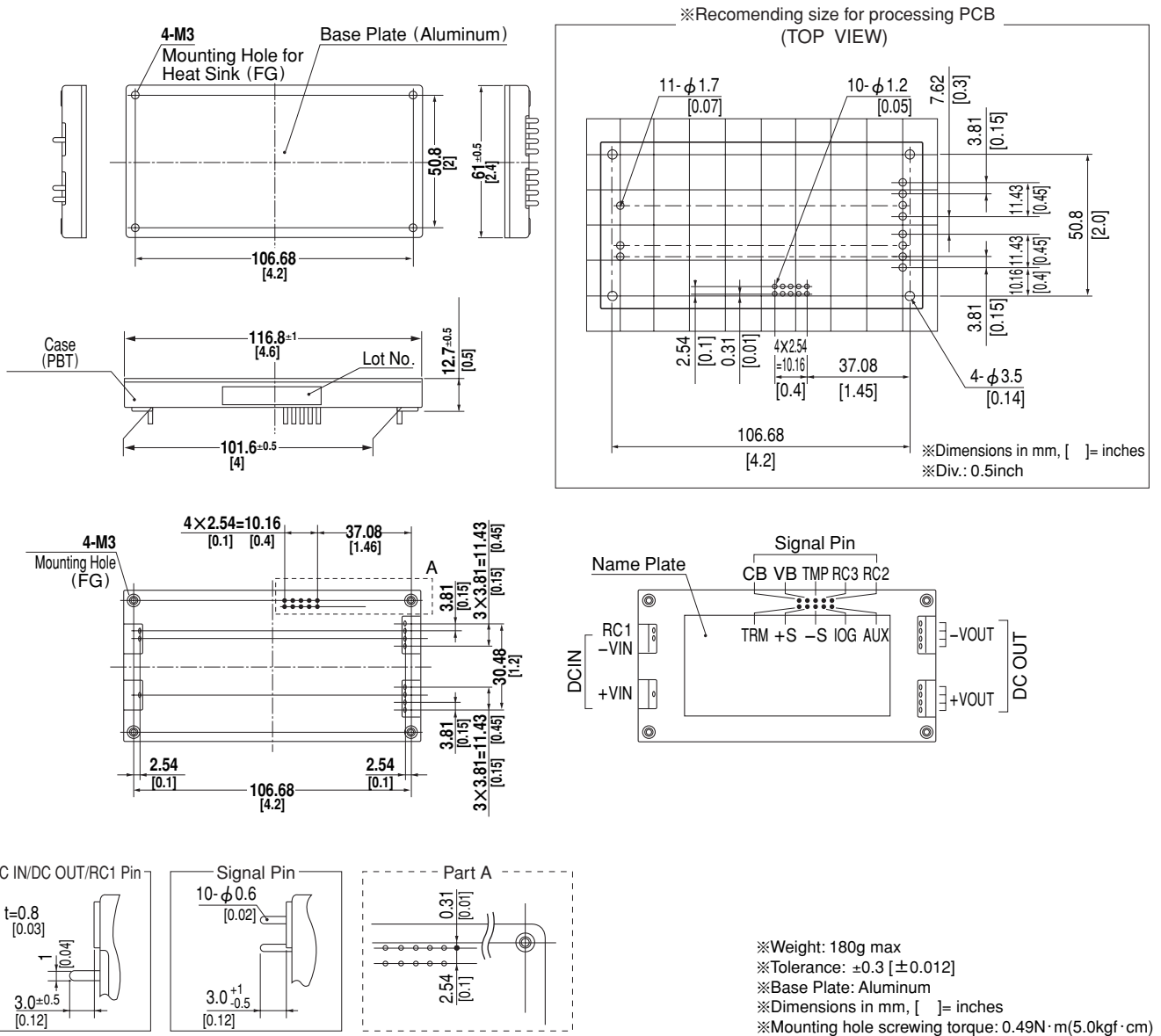
*1 At rated input(DC280V) and rated load.

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

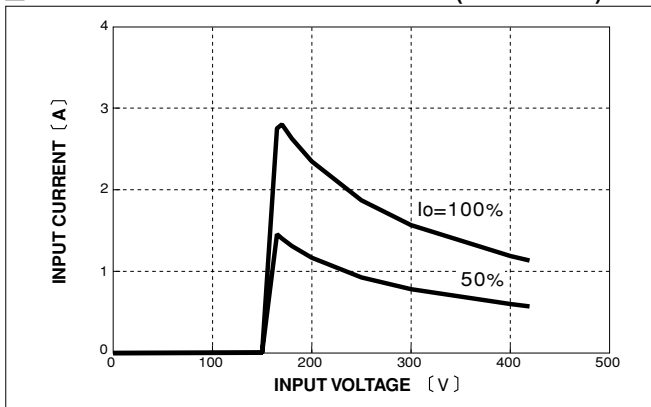
*4 Please consult us in regard to use from -40°C.

External view

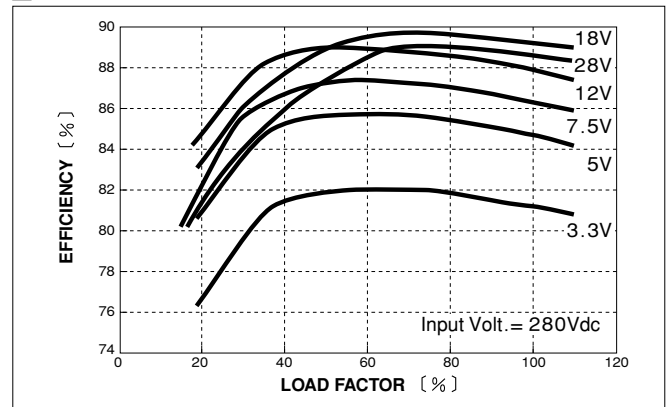


Performance data

INPUT CURRENT CHARACTERISTICS (DBS400B12)



EFFICIENCY CHARACTERISTICS



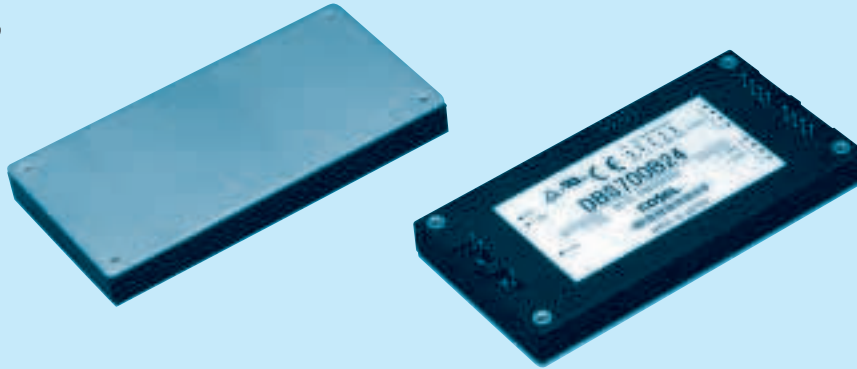
DBS700B

DB S 700 B 28

① ② ③ ④ ⑤



RoHS



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

| MODEL | DBS700B12 | DBS700B24 | DBS700B28 | DBS700B36 | DBS700B48 |
|-----------------------|-----------|-----------|-----------|-----------|-----------|
| MAX OUTPUT WATTAGE[W] | 696 | 696 | 700 | 702 | 696 |
| DC OUTPUT | 12V 58A | 24V 29A | 28V 25A | 36V 19.5A | 48V 14.5A |

SPECIFICATIONS

| | MODEL | DBS700B12 | DBS700B24 | DBS700B28 | DBS700B36 | DBS700B48 | |
|---------------------------------|--|--|----------------|----------------|----------------|-----------|--------|
| INPUT | VOLTAGE[V] | DC200 - 400 | | | | | |
| | CURRENT[A] | *1 2.76typ | 2.76typ | 2.76typ | 2.76typ | 2.73typ | |
| | EFFICIENCY[%] | *1 90.0typ | 90.0typ | 90.5typ | 90.0typ | 91.0typ | |
| OUTPUT | VOLTAGE[V] | 12 | 24 | 28 | 36 | 48 | |
| | CURRENT[A] | 58 | 29 | 25 | 19.5 | 14.5 | |
| | LINE REGULATION[mV] | 40max | 95max | 95max | 95max | 120max | |
| | LOAD REGULATION[mV] | 100max | 190max | 190max | 200max | 240max | |
| | RIPPLE[mVp-p] | 0 to +100°C | 120max | 120max | 120max | 150max | 200max |
| | | -40 to 0°C | 160max | 160max | 160max | 200max | 250max |
| | RIPPLE NOISE[mVp-p] | 0 to +100°C | 150max | 150max | 150max | 200max | 250max |
| | | -40 to 0°C | 180max | 180max | 180max | 240max | 400max |
| | TEMPERATURE REGULATION[mV] | 0 to +65°C | 120max | 280max | 280max | 360max | 480max |
| | | -40 to +100°C | 200max | 480max | 480max | 680max | 960max |
| DRIFT[mV] | *3 40max | 90max | 90max | 120max | 180max | | |
| START-UP TIME[ms] | 200max (DCIN 280V, Io=100%) | | | | | | |
| OUTPUT VOLTAGE ADJUSTMENT RANGE | *4 Fixed (TRM pin open), 60 - 110% adjustable by external VR or external voltage | | | | | | |
| OUTPUT VOLTAGE SETTING[V] | 11.64 - 12.36 | 23.28 - 24.72 | 27.16 - 28.84 | 34.92 - 37.08 | 46.56 - 49.44 | | |
| OVERCURRENT PROTECTION | Works over 105% of rating and recovers automatically | | | | | | |
| OVERVOLTAGE PROTECTION | 13.80 - 16.80V | 27.60 - 33.60V | 32.20 - 39.20V | 41.40 - 50.40V | 55.20 - 63.00V | | |
| 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 | -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 , 3minutes period, 60minutes each along X, Y and Z axis | | | | | |
| | IMPACT | 196.1m/s ² , 11ms once each along X, Y and Z axis | | | | | |
| SAFETY | AGENCY APPROVALS | UL60950-1, C-UL, EN60950-1, EN50178 | | | | | |
| 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) | | | | | |

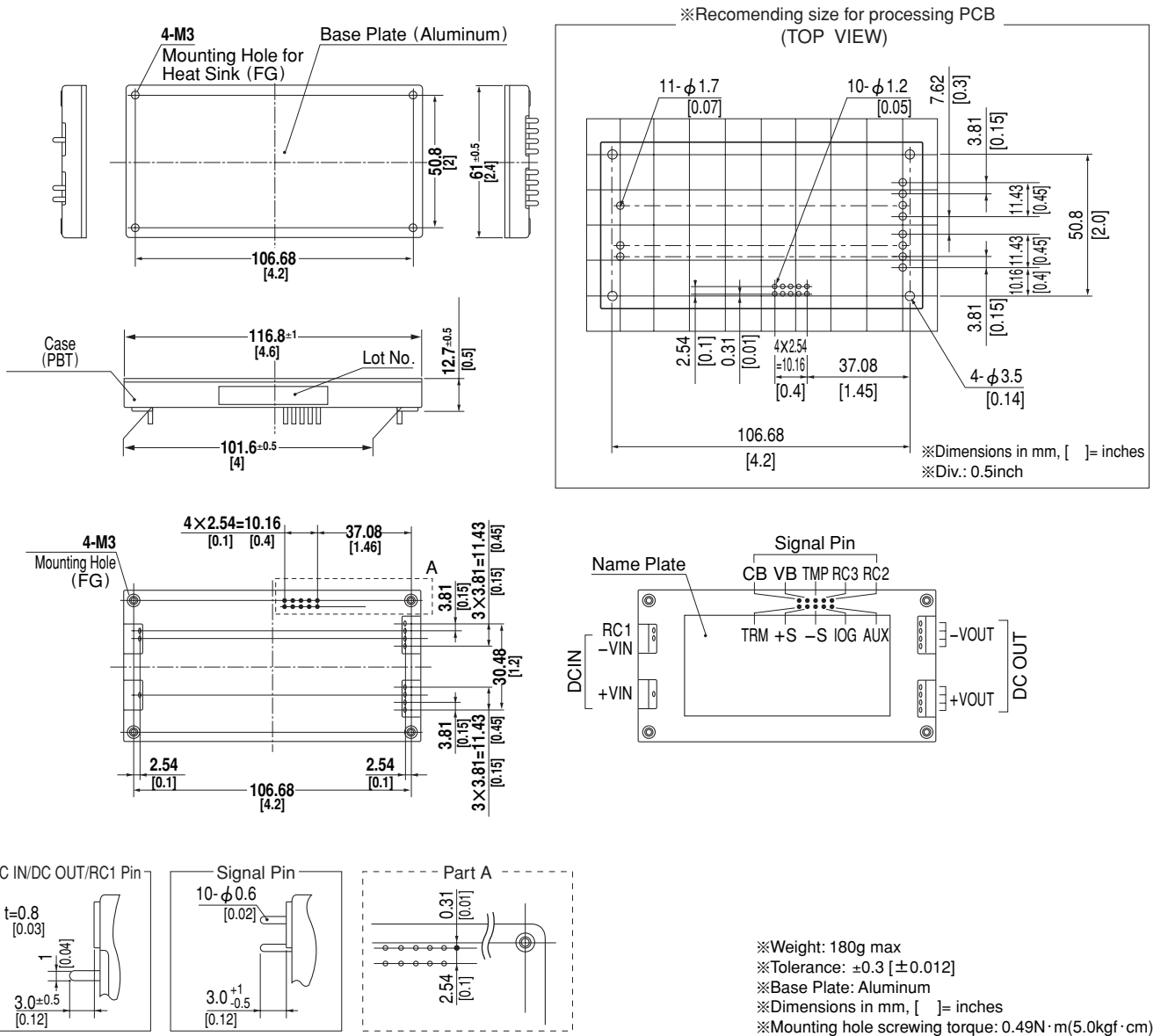
*1 At rated input(DC280V) and rated load.

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

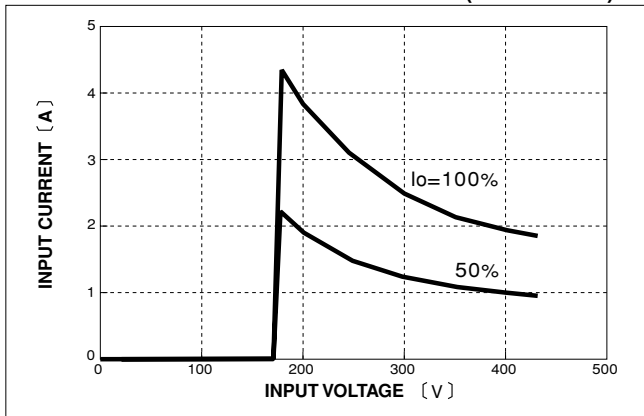
*4 Refer to the manual for the input range.

External view



Performance data

INPUT CURRENT CHARACTERISTICS (DBS700B28)



EFFICIENCY CHARACTERISTICS (DBS700B28)

