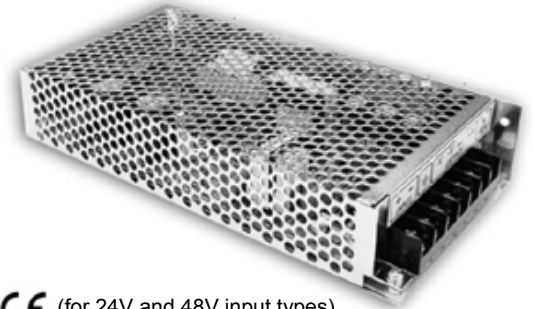


FEATURES

- 105°C Output Capacitor
- Low Cost, High Reliability
- Compact Size, Light Weight
- 100% Full Load Burn-In Tested
- Built-In EMI Filter, Low Ripple Noise
- High Efficiency, Low Working Temperature
- Short Circuit, Overload, and Over Voltage Protected



CE (for 24V and 48V input types)

SPECIFICATIONS: DCSD-100 Series

All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.
We reserve the right to change specifications based on technological advances.

INPUT SPECIFICATIONS

| | |
|-----------------|---|
| Input Voltage | DCSD-100B: 19 ~ 36VDC DCSD-100C: 36 ~ 72VDC DCSD-100D: 72 ~ 144VDC or 85~132VAC |
| AC Current | 5V outputs: 6A at 24VDC 12V outputs: 3A at 48VDC 24V outputs: 1.5A at 96VDC |
| Inrush Current | DCSD-100D: 20A at 96VDC |
| Leakage Current | DCSD-100D: < 0.75mA at 120VAC |

OUTPUT SPECIFICATIONS

| | |
|---------------------------------------|---|
| Output Voltage | See Table |
| Output Voltage Tolerance (See Note 3) | 5V outputs: ±2% 12V & 24V outputs: ±1% |
| Voltage Adjustability | See Table |
| Output Current | See Table |
| Line Regulation | 5V outputs: ±0.5% 12V outputs: ±0.3% 24V outputs: ±0.2% |
| Load Regulation | 5V outputs: ±0.5% 12V outputs: ±0.3% 24V outputs: ±0.2% |
| Ripple & Noise | See Table |
| Output Power | See Table |
| Setup, Rise, Hold Up Time | DCSD-100D (only): 2s, 50ms, 20ms |

PROTECTION

| | |
|-------------------------|---|
| Over Voltage Protection | 5V outputs: 5.75 ~ 6.75V / 10% Load 12V outputs: 16.8 ~ 20V / 10% Load 24V outputs: 31.5 ~ 37.5V / 10% Load |
| Over Load Protection | 105%~135% Type: Foldback Current Limiting Reset: Auto recovery. |

GENERAL SPECIFICATIONS

| | |
|----------------------|--|
| Efficiency | See Table |
| Withstand Voltage | 1.5KVAC (input to output), 1.5KVAC (input to FG), 0.5KVAC (output to FG) |
| Isolation Resistance | 500VDC / 100MΩ (input to output, input to FG, output to FG) |

ENVIRONMENTAL SPECIFICATIONS

| | |
|-------------------------|---|
| Working Temperature | -10°C to +60°C (refer to output derating curve) |
| Storage Temperature | -20°C to +85°C |
| Working Humidity | 20% to 90% RH |
| Storage Humidity | 10% to 95% RH |
| Vibration | 10~500Hz, 2G 10min./1cycle, Period for 60min. each axes |
| Temperature Coefficient | ±0.03%/°C (0°C~50°C) |

PHYSICAL SPECIFICATIONS

| | |
|------------|---------------------------|
| Weight | 600 grams |
| Dimensions | 199(L) x 98(W) x 38(H) mm |

SAFETY & EMC

| | |
|---------------|---|
| EMC Standards | EN55022 CLASS B (Radiation), EN61000-4-2,3,4,6,8 ENV50204 Verification for DCSD-100B/C Series only, not including DCSD-100D series. |
|---------------|---|

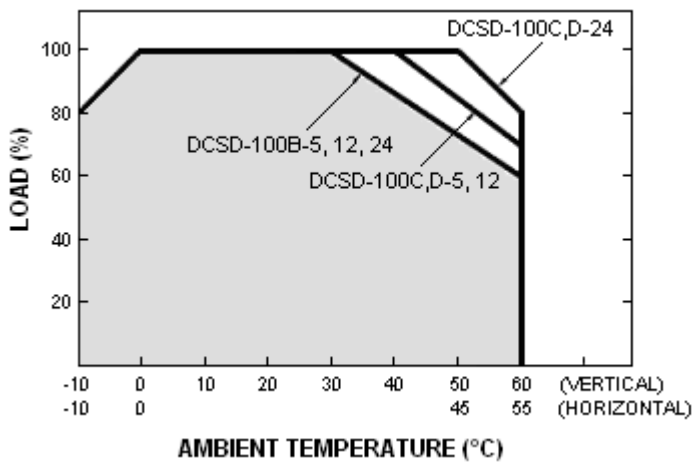
OUTPUT VOLTAGE / CURRENT RATING CHART

| Model | Input Voltage | Output Voltage | Voltage Adjustability | Rated Output Current | Output Ripple & Noise | Output Power | Efficiency |
|--------------|--------------------------|----------------|-----------------------|----------------------|-----------------------|--------------|------------|
| DCSD-100B-5 | 24 VDC (19 ~ 36 VDC) | 5 VDC | 4.5 ~ 5.5VDC | 20A | 100mVp-p | 100W | 74% |
| DCSD-100B-12 | | 12 VDC | 11 ~ 16VDC | 8.5A | 120mVp-p | 102W | 75% |
| DCSD-100B-24 | | 24 VDC | 23 ~ 30VDC | 4.2A | 150mVp-p | 100.8W | 76% |
| DCSD-100C-5 | 48 VDC (36 ~ 72 VDC) | 5 VDC | 4.5 ~ 5.5VDC | 20A | 100mVp-p | 100W | 75% |
| DCSD-100C-12 | | 12 VDC | 11 ~ 16VDC | 8.5A | 120mVp-p | 102W | 77% |
| DCSD-100C-24 | | 24 VDC | 23 ~ 30VDC | 4.2A | 150mVp-p | 100.8W | 80% |
| DCSD-100D-5 | 96 VDC (72 ~ 144 VDC) | 5 VDC | 4.5 ~ 5.5VDC | 20A | 100mVp-p | 100W | 78% |
| DCSD-100D-12 | | 12 VDC | 11 ~ 16VDC | 8.5A | 120mVp-p | 102W | 81% |
| DCSD-100D-24 | | 24 VDC | 23 ~ 30VDC | 4.2A | 150mVp-p | 100.8W | 83% |

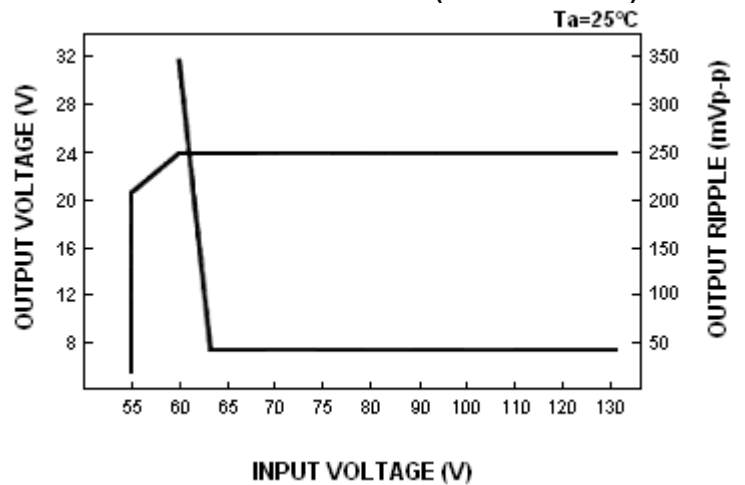
NOTES

1. The DCSD-100 Series is designated as DCSD-100x-y where x can be **B** (19 ~ 36 VDC input voltage), **C** (36 ~ 72 VDC input voltage), or **D** (72 ~ 144 VDC input voltage) and y can be 5, 12, or 24 for output voltage.
2. All parameters are specified at rated input, rated load and 25°C 70% RH. ambient.
3. Tolerance includes setup tolerance, line regulation, and load regulation.
4. Ripple & noise are measured at 20MHz using a 12" twisted pair terminated with a 0.1uF & 47uF capacitor.
5. Line regulation is measured from low line to high line at rated load.
6. Load regulation is measured from 0% to 100% rated load.

DERATING CURVE

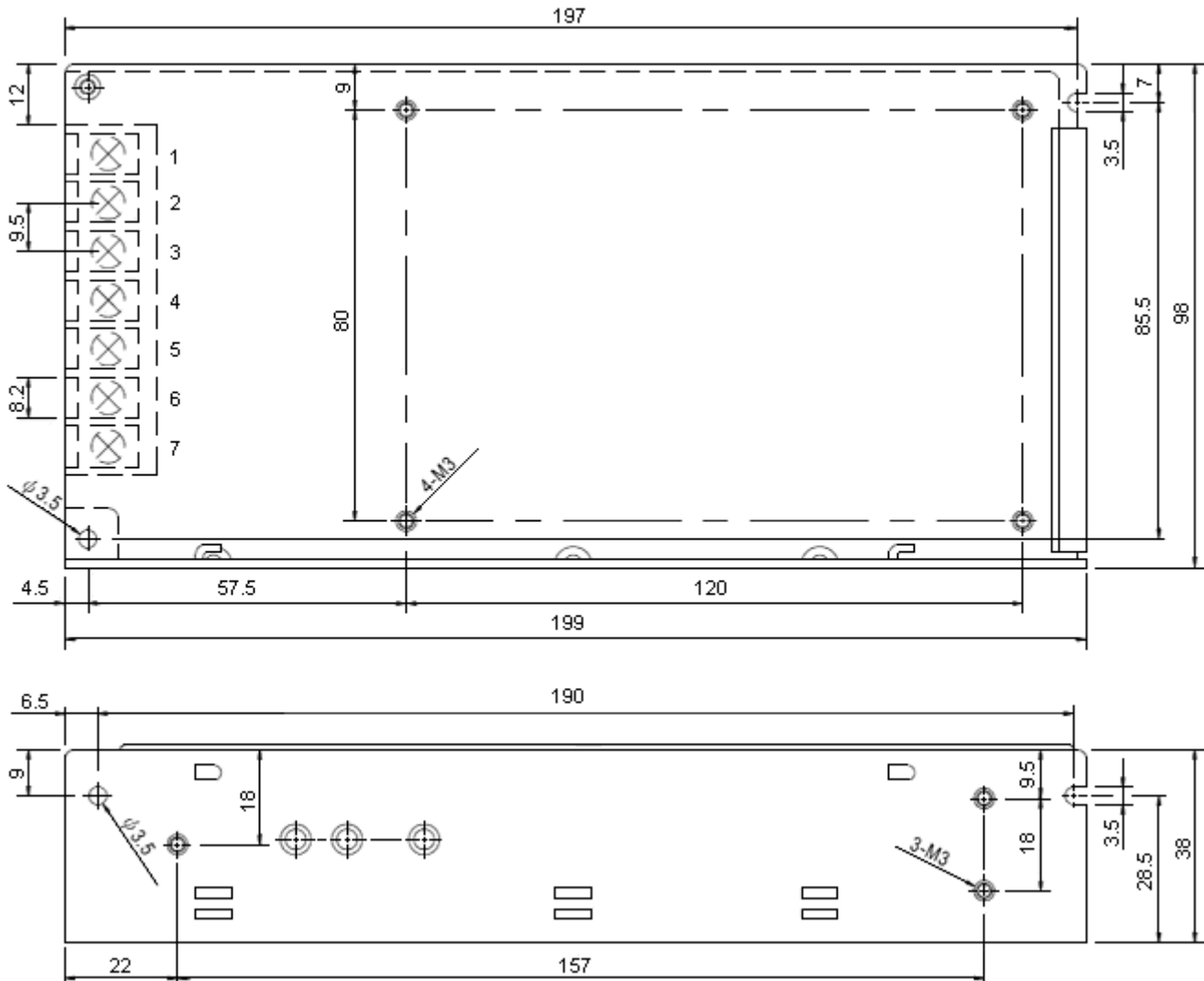


STATIC CHARACTERISTICS (DCSD-100D-24)



MECHANICAL DRAWING

Unit: mm



| Terminal Pin No. Assignment | | | |
|-----------------------------|------------|---------|----------------|
| Pin No. | Assignment | Pin. No | Assignment |
| 1,2 | INPUT | 4,5 | DC OUTPUT (-V) |
| 3 | FG | 6,7 | DC OUTPUT (+V) |

| DCSD-100B,C | |
|-------------|---------------|
| Pin No. | Assignment |
| 1 | DC INPUT (V+) |
| 2 | DC INPUT (V-) |

| DCSD-100D | |
|-----------|-------------|
| Pin No. | Assignment |
| 1,2 | AC/DC INPUT |