

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



SPECIFICATIONS: DCSD-25 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-25A: 9.2 ~ 18VDC DCSD-25B: 19 ~ 36VDC DCSD-25C: 36 ~ 72VDC
Input Current	DCSD-25A: 3.2A at 12VDC DCSD-25B: 1.6A at 24VDC DCSD-25C: 0.8A at 48VDC

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Output Voltage Tolerance (See Note 3)	5V outputs: $\pm 2\%$ 12V & 24V outputs: $\pm 1\%$
Voltage Adjustability	See Table
Output Current	See Table
Line Regulation	5V outputs: $\pm 0.5\%$ 12V outputs: $\pm 0.3\%$ 24V outputs: $\pm 0.2\%$
Load Regulation	5V outputs: $\pm 0.5\%$ 12V outputs: $\pm 0.3\%$ 24V outputs: $\pm 0.2\%$
Ripple & Noise	5V outputs: 100mVp-p 12V outputs: 120mVp-p 24V outputs: 150mVp-p
Output Power	See Table
Setup, Rise Time	2.5s, 50ms

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%~150% 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 / 100M Ω (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	$\pm 0.03\%/^{\circ}\text{C}$ (0°C~50°C)

PHYSICAL SPECIFICATIONS

Weight	360 grams
Dimensions	99(L) x 97(W) x 35(H) mm

SAFETY & EMC

EMC Standards	EN55022 CLASS B (Radiation), EN61000-4-2,3,4,6,8 ENV50204 Verification
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Wall Industries, Inc.

DCSD-25 Series
25 Watt
Single Output
Chassis Mount DC/DC Converter

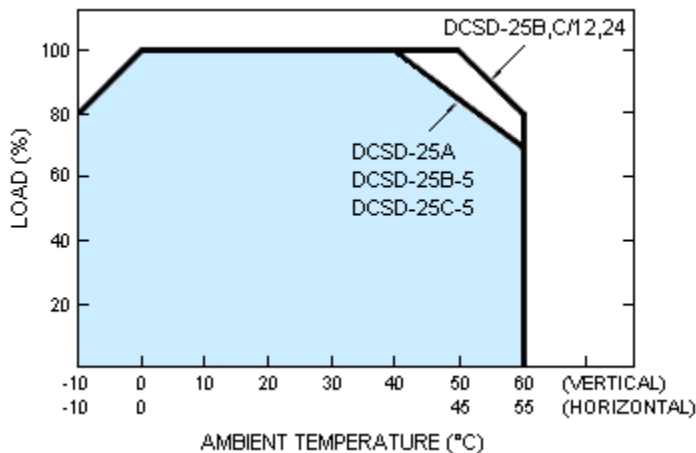
OUTPUT VOLTAGE / CURRENT RATING CHART

Model	Input Voltage	Output Voltage	Voltage Adjustability	Rated Output Current	Output Ripple & Noise	Output Power	Efficiency
DCSD-25A-5	12 VDC (9.2 ~ 18 VDC)	5 VDC	4.5 ~ 5.5VDC	5A	100mVp-p	25W	71%
DCSD-25A-12		12 VDC	11 ~ 16VDC	2.1A	120mVp-p	25.2W	72%
DCSD-25A-24		24 VDC	23 ~ 30VDC	1.1A	150mVp-p	26.4W	74%
DCSD-25B-5	24 VDC (19 ~ 36 VDC)	5 VDC	4.5 ~ 5.5VDC	5A	100mVp-p	25W	72%
DCSD-25B-12		12 VDC	11 ~ 16VDC	2.1A	120mVp-p	25.2W	75%
DCSD-25B-24		24 VDC	23 ~ 30VDC	1.1A	150mVp-p	26.4W	78%
DCSD-25C-5	48 VDC (36 ~ 72 VDC)	5 VDC	4.5 ~ 5.5VDC	5A	100mVp-p	25W	75%
DCSD-25C-12		12 VDC	11 ~ 16VDC	2.1A	120mVp-p	25.2W	78%
DCSD-25C-24		24 VDC	23 ~ 30VDC	1.1A	150mVp-p	26.4W	81%

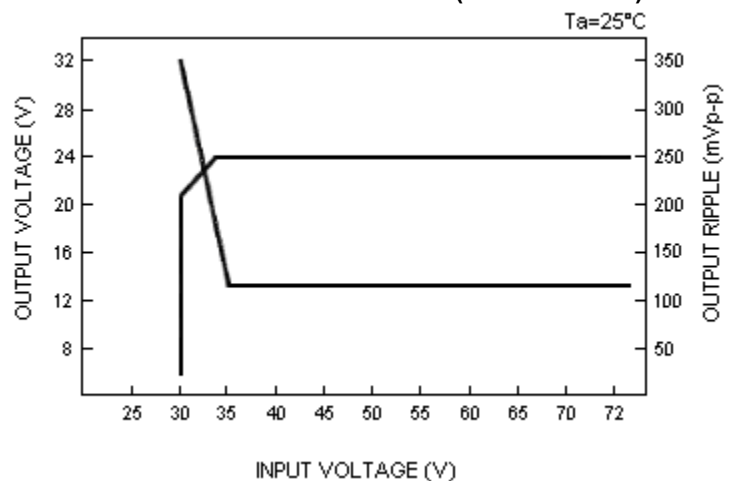
NOTES

1. The DCSD-25 Series is designated as DCSD-25x-y where x can be **A** (9.2 ~ 18 VDC input voltage), **B** (19 ~ 36 VDC input voltage), or **C** (36 ~ 72 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

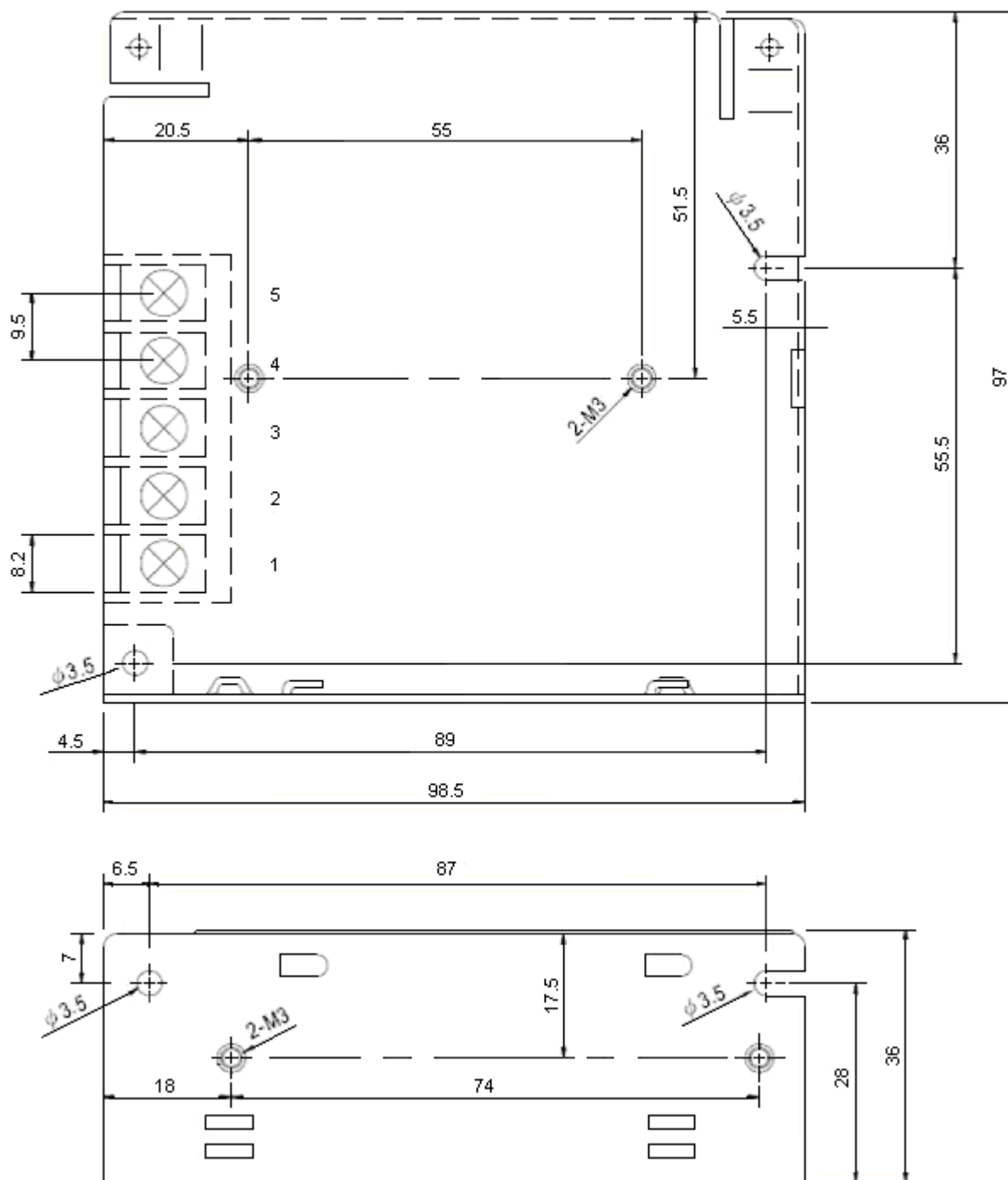


STATIC CHARACTERISTICS (DCSD-25C-24)



MECHANICAL DRAWING

Unit: mm



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