

# 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-50	Series				
All specifications are base	ed on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.				
	erve the right to change specifications based on technological advances.				
INPUT SPECIFICATIONS					
	DCSD-50 <b>A</b> : 9.2 ~ 18VDC				
Input Voltage	DCSD-50 <b>B</b> : 19 ~ 36VDC				
	DCSD-50 <b>C</b> : 36 ~ 72VDC DCSD-50 <b>A</b> : 7A at 12VDC				
DC Current	DCSD-50 <b>B</b> : 3A at 24VDC				
	DCSD-50 <b>C</b> : 1.5A at 48VDC				
OUTPUT SPECIFICATIONS					
Output Voltage	See Table				
Output Voltage Tolerance (See Note 3)	5V outputs: ±2%				
1 6 ( )	12V & 24V outputs: ±1%				
Voltage Adjustability	See Table				
Output Current	See Table				
Line Regulation	5V outputs: ±0.5% 12V outputs: ±0.3%				
Line Regulation	24V outputs: ±0.3%				
	5V outputs: ±0.5%				
Load Regulation	12V outputs: ±0.3%				
	24V outputs: ±0.2%				
	5V outputs: 100mVp-p				
Ripple & Noise	12V outputs: 120mVp-p 24V outputs: 150mVp-p				
Output Power	See Table				
Setup, Rise Time	2.5s, 50ms				
PROTECTION	2.00, 00110				
	5V outputs: 5.75 ~ 6.75V / 10% Load				
Over Voltage Protection	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 / 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	500 grams				
Dimensions	159(L) x 97(W) x 38(H) mm				
SAFETY & EMC					
EMC Standards	EN55022 CLASS B (Radiation), EN61000-4-2,3,4,6,8 ENV50204 Verification				

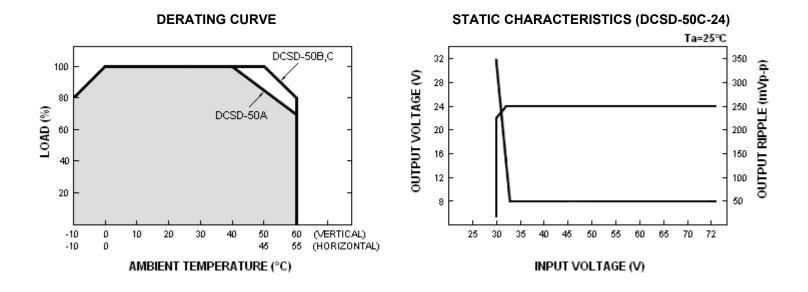


Model	Input Voltage	Output Voltage	Voltage Adjustability	Rated Output Current	Output Ripple & Noise	Output Power	Efficiency
DCSD-50A-5	12 VDC (9.2 ~ 18 VDC)	5 VDC	4.5 ~ 5.5VDC	10A	100mVp-p	50W	70%
DCSD-50A-12		12 VDC	11 ~ 16VDC	4.2A	120mVp-p	50.4W	73%
DCSD-50A-24		24 VDC	23 ~ 30VDC	2.1A	150mVp-p	50.4W	76%
DCSD-50B-5	24 VDC (19 ~ 36 VDC)	5 VDC	4.5 ~ 5.5VDC	10A	100mVp-p	50W	72%
DCSD-50B-12		12 VDC	11 ~ 16VDC	4.2A	120mVp-p	50.4W	75%
DCSD-50B-24		24 VDC	23 ~ 30VDC	2.1A	150mVp-p	50.4W	78%
DCSD-50C-5	48 VDC (36 ~ 72 VDC)	5 VDC	4.5 ~ 5.5VDC	10A	100mVp-p	50W	74%
DCSD-50C-12		12 VDC	11 ~ 16VDC	4.2A	120mVp-p	50.4W	80%
DCSD-50C-24		24 VDC	23 ~ 30VDC	2.1A	150mVp-p	50.4W	83%

# **OUTPUT VOLTAGE / CURRENT RATING CHART**

### NOTES

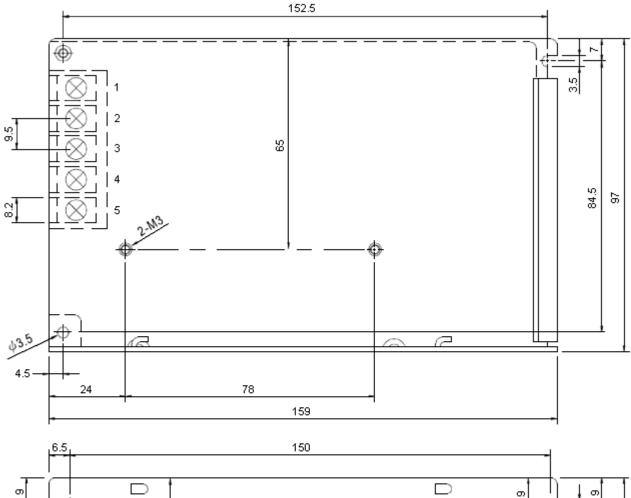
- The DCSD-50 Series is designated as DCSD-50x-y where x can be A (9.2 ~ 18 VDC input voltage),
  B (19 ~ 36 VDC input voltage), or C (36 ~ 72 VDC input voltage) and y can be 5, 12, or 24 for output voltage.
- 2. All parameters are specified at rated input, rated load and 25°C 70% RH. ambient.
- 3. Tolerance 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.

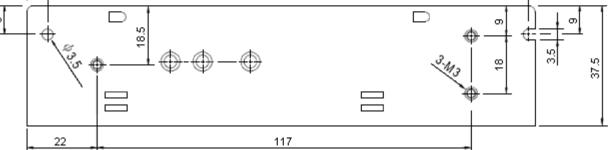




# **MECHANICAL DRAWING**

#### Unit: mm





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

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