



# 50W Isolated Dual Output Switching Power Supply

# ID-50 series



### ■ Features :

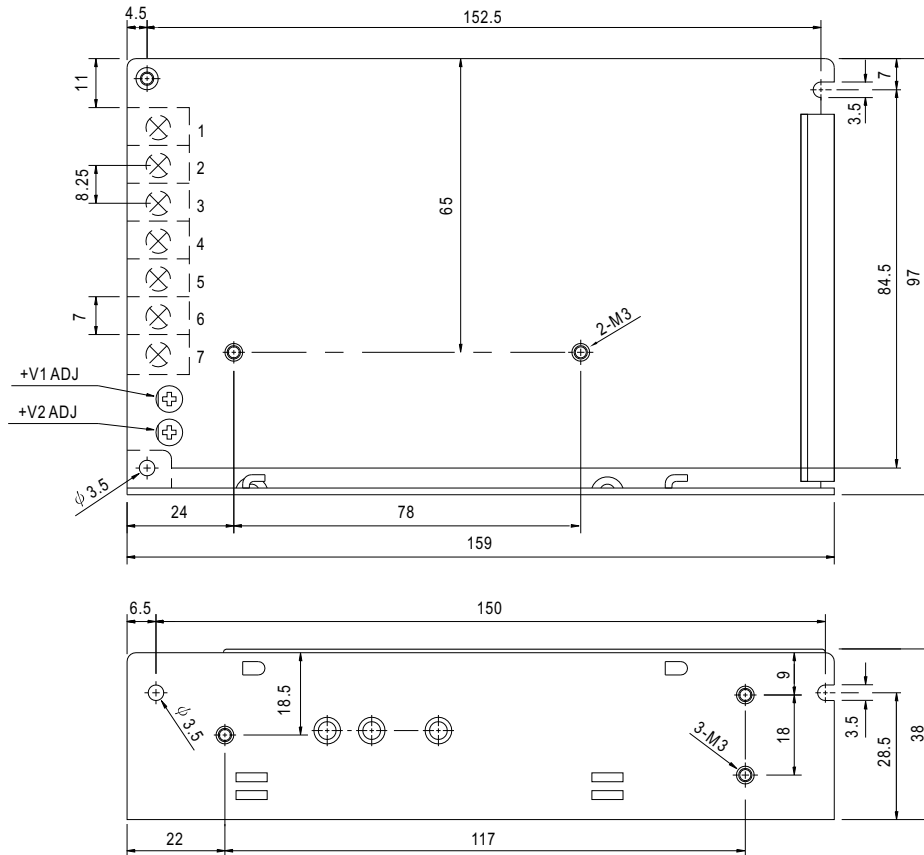
- Isolated output & GND for CH1,CH2
- Universal AC input/Full range
- Protections:Short circuit/Overload/Over voltage
- Cooling by free air convection
- 100% full load burn-in test
- Fixed switching frequency at 50KHz
- Low cost
- High reliability
- 1 year warranty

### SPECIFICATION

MODEL	ID-50A		ID-50B		ID-50C		ID-50D		
OUTPUT	OUTPUT	CH1	CH2	CH1	CH2	CH1	CH2	CH1	CH2
	DC VOLTAGE	5V	5V	13.5V	13.5V	27V	27V	5V	13.5V
	RATED CURRENT	6A	2A	1.8A	1.8A	0.9A	0.9A	5A	1.7A
	CURRENT RANGE	0.5 ~ 6A	0 ~ 2A	0.3 ~ 2A	0 ~ 2A	0.18 ~ 1A	0 ~ 1A	1 ~ 5A	0 ~ 2A
	RATED POWER	40W		48.6W		48.6W		48W	
	RIPPLE & NOISE (max.) Note.2	50mVp-p	100mVp-p	100mVp-p	150mVp-p	100mVp-p	150mVp-p	50mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	CH1,2 : 4.75 ~ 5.5V		CH1,2 : 12 ~ 15V		CH1,2 : 24 ~ 30V		CH1 : 4.75 ~ 5.5V	
	VOLTAGE TOLERANCE Note.3	±1.0%	±2.0%	±1.0%	±2.0%	±1.0%	±2.0%	±1.0%	±2.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.3%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±1.0%	±0.5%	±1.0%	±0.3%	±1.0%	±0.5%	±1.0%
	SETUP, RISE TIME	1600ms, 50ms at full load							
HOLD TIME (Typ.)	100ms at full load								
INPUT	VOLTAGE RANGE	85 ~ 264VAC 120 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz							
	EFFICIENCY(Typ.)	66%		70%		72%		68%	
	AC CURRENT (Typ.)	1A/115VAC 0.6A/230VAC							
	INRUSH CURRENT (Typ.)	COLD START 22A/115VAC 45A/230VAC							
	LEAKAGE CURRENT	<3.5mA / 240VAC							
PROTECTION	OVER LOAD	105 ~ 150%/115VAC rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed							
	OVER VOLTAGE	5V: 6.4 ~ 7.5V		13.5V:17 ~ 21V		27V:32 ~ 40V		5V:6.4 ~ 7.5V	
		Protection type : Hiccup mode, recovers automatically after fault condition is removed							
ENVIRONMENT	WORKING TEMP.	-10 ~ +60°C (Refer to output load derating curve)							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)on +5V output							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
SAFETY & EMC	SAFETY STANDARDS	Design refer to UL1012							
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC							
	EMI CONDUCTION & RADIATION	Design refer to FCC Part15							
OTHERS	MTBF	312.2K hrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	159*97*38mm (L*W*H)							
	PACKING	0.54Kg; 24pcs/13.8Kg/0.75CUFT							
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation.								

**Mechanical Specification**

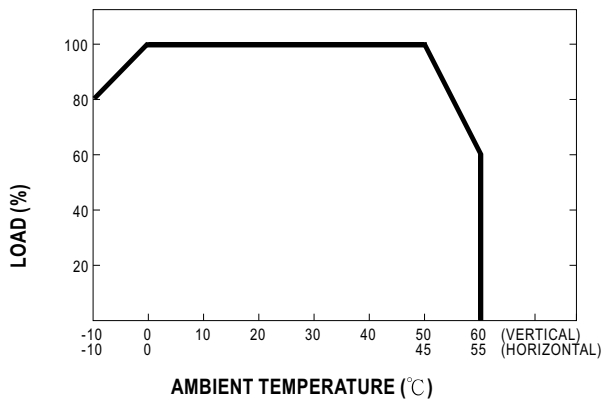
Case No. 901 Unit:mm



Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	AC/L	5	DC OUTPUT +V2
2	AC/N	6	DC OUTPUT G1
3	FG $\perp$	7	DC OUTPUT +V1
4	DC OUTPUT G2		

**Derating Curve**



**Static Characteristics(B)**

