



#### ■ Features :

- 2:1 wide input range
- Protections:Short circuit/Over load /Over voltage
- Built-in EMI filter,low ripple noise
- 100% full load burn-in test
- Low cost
- High reliability
- 1 year warranty

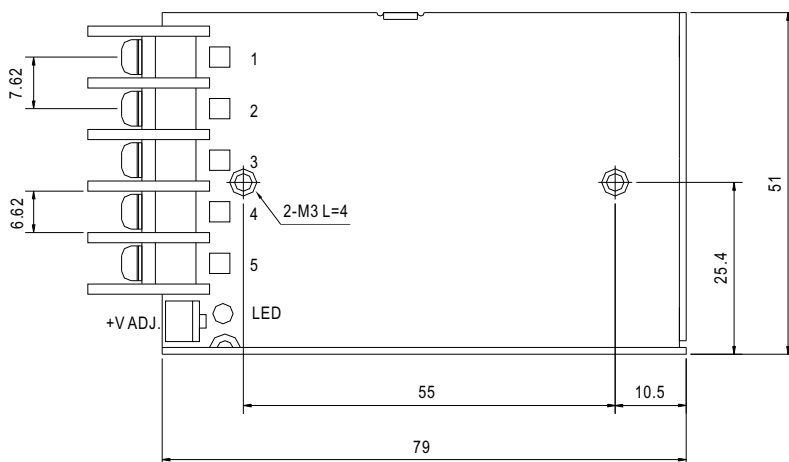
#### SPECIFICATION



MODEL		SD-15A-05	SD-15B-05	SD-15C-05	SD-15A-12	SD-15B-12	SD-15C-12	SD-15A-24	SD-15B-24	SD-15C-24
OUTPUT	DC VOLTAGE	5V			12V			24V		
	RATED CURRENT	3A			1.25A			0.625A		
	CURRENT RANGE	0 ~ 3A			0 ~ 1.25A			0 ~ 0.625A		
	RATED POWER	15W			15W			15W		
	RIPPLE & NOISE (max.) <small>Note.2</small>	100mVp-p			120mVp-p			150mVp-p		
	VOLTAGE ADJ.RANGE	4.75~5.5VDC			10.8~13.2VDC			21.6~26.4VDC		
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.0%			±1.0%			±1.0%		
	LINE REGULATION	±0.5%			±0.3%			±0.2%		
	LOAD REGULATION	±0.5%			±0.3%			±0.2%		
	SETUP, RISE ,HOLD UP TIME	2.5s, 25ms,--- 12VDC/24VDC/48VDC at full load								
INPUT	VOLTAGE RANGE	A: 9.2 ~18VDC    B:18 ~ 36VDC    C:36~72VDC								
	EFFICIENCY(Typ.)	68%	76%	75%	72%	76%	79%	70%	77%	81%
	DC CURRENT(Typ.)	1.9A/12VDC		0.9A/24VDC		0.45A/48VDC				
PROTECTION	OVER LOAD	105% -160% rated output power								
		Protection type : hiccup mode , recovers automatically after fault condition is removed								
	OVER VOLTAGE	5.75 ~ 6.75V				13.8~ 16.2V			27.6 ~ 32.4V	
		Protection type : Shut down o/p voltage, re-power on to recover								
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃ , 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min.each along X, Y, Z axes								
SAFETY & EMC	WITHSTAND VOLTAGE	I/P-O/P:3KVDC    I/P-FG:1.5KVDC    O/P-FG:0.8KVDC								
	ISOLATION RESISTANCE	I/P-O/P,I/P-FG,O/P-FG:100M Ohms/500VDC								
	EMI CONDUCTION&RADIATION	Compliance to EN55022(CISPR22) CLASS B								
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,6,8;ENV50204,EN55024,light industry level,criteria A								
OTHERS	DIMENSION	79*51*28mm (L*W*H)								
	PACKING	0.18kg,60 PCS/11.8kg								
NOTE	1. All parameters NOT specially mentioned are measured at normal input, rated load and 25℃ 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. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.									

## Mechanical Specification

Case No.931 Unit:mm

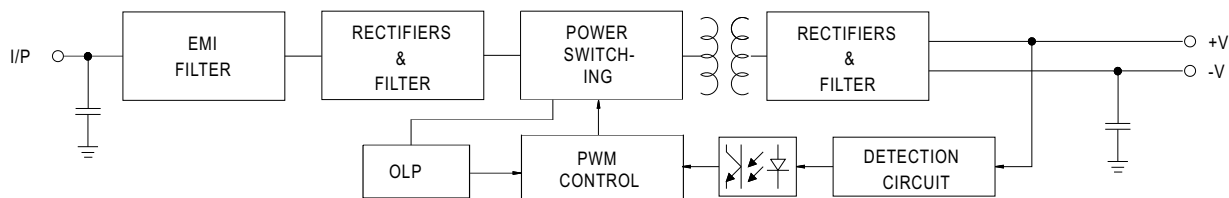


Terminal Pin. No Assignment

Pin No.	Assignment	Pin No.	Assignment
1	DC INPUT V+	4	DC OUTPUT +V
2	DC INPUT V-	5	DC OUTPUT -V
3	FG $\perp$		

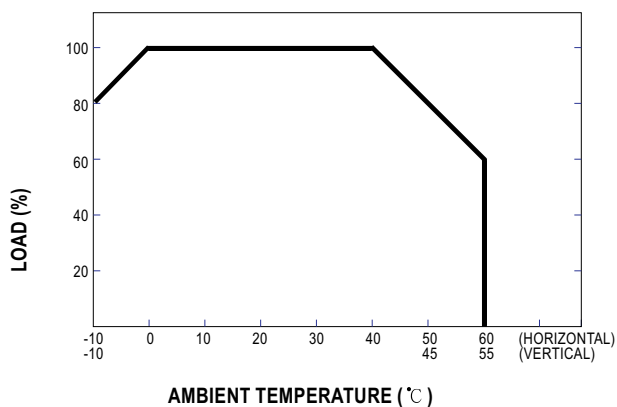
## Block Diagram

fosc : 96KHz



## Output Derating

## Static Characteristics





#### ■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage
- 1500VAC I/O isolation
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- Fixed switching frequency at 83KHz
- Low cost
- High reliability
- 2 years warranty

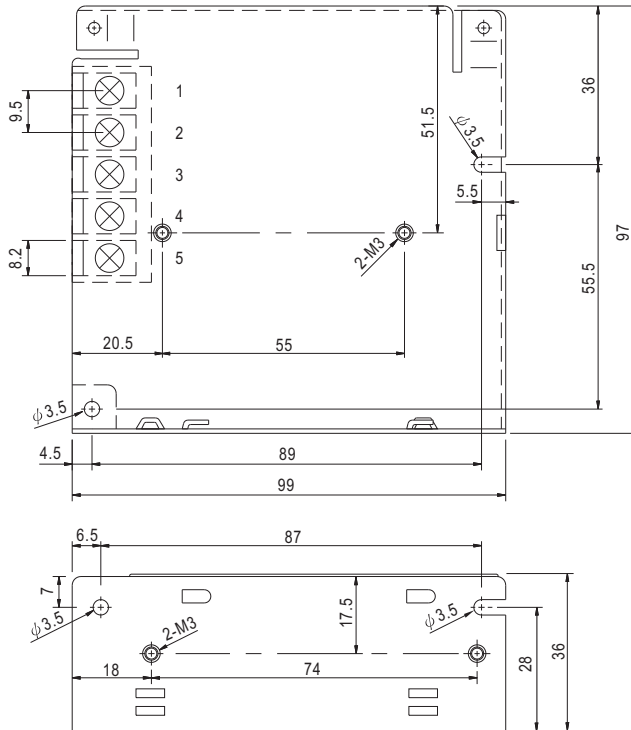


#### SPECIFICATION

MODEL		SD-25A-5	SD-25B-5	SD-25C-5	SD-25A-12	SD-25B-12	SD-25C-12	SD-25A-24	SD-25B-24	SD-25C-24
OUTPUT	DC VOLTAGE	5V			12V			24V		
	RATED CURRENT	5A			2.1A			1.1A		
	CURRENT RANGE	0 ~ 5A			0 ~ 2.1A			0 ~ 1.1A		
	RATED POWER	25W			25.2W			26.4W		
	RIPPLE & NOISE (max.) <small>Note.2</small>	100mVp-p			120mVp-p			150mVp-p		
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC			11 ~ 16VDC			23 ~ 30VDC		
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.0%			±1.0%			±1.0%		
	LINE REGULATION	±0.5%			±0.3%			±0.2%		
	LOAD REGULATION	±0.5%			±0.3%			±0.2%		
SETUP, RISE, HOLD UP TIME		2.5s, 50ms, ----- at full load								
INPUT	VOLTAGE RANGE	A:9.2 ~ 18VDC    B:19 ~ 36VDC    C:36 ~ 72VDC								
	EFFICIENCY (Typ.)	71%	72%	74%	72%	75%	78%	75%	78%	81%
	DC CURRENT	3.2A/12V	1.6A/24V	0.8A/48V	3.2A/12V	1.6A/24V	0.8A/48V	3.2A/12V	1.6A/24V	0.8A/48V
PROTECTION	OVERLOAD	105 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	5.75 ~ 6.75V/10% load			16.8 ~ 20V/10% load			31.5 ~ 37.5V/10% load		
		Protection type : Hiccup mode, recovers automatically after fault condition is removed								
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃ )								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	Design refer to LVD								
	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 / 25℃ / 70% RH								
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B								
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8, EN55024,heavy industry level, criteria A								
OTHERS	MTBF	374.3K hrs min.(SD-25A)		365.9K hrs min.(SD-25B)		377.5K Hrs min.(SD-25C)		MIL-HDBK-217F (25℃)		
	DIMENSION	99*97*36mm (L*W*H)								
	PACKING	0.38Kg; 45pcs/17.8Kg/0.9CUFT								
NOTE	1. All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25℃ 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. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.									

Case No. 905 Unit:mm

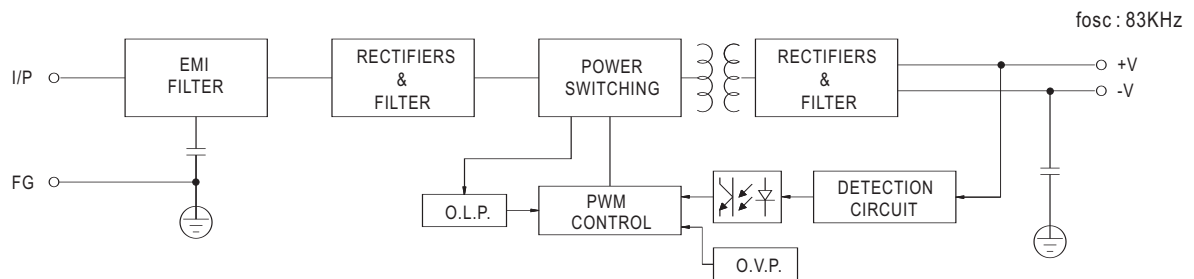
### Mechanical Specification



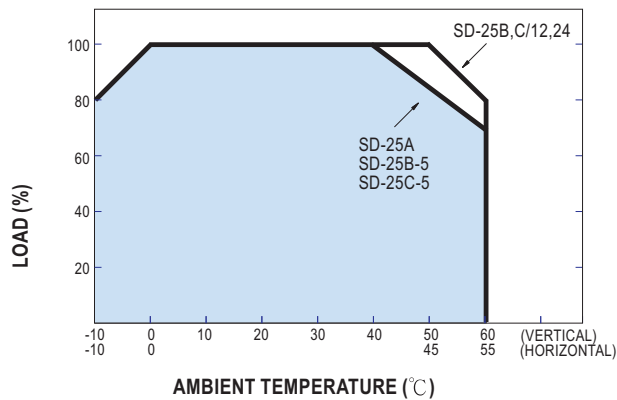
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	DC INPUT V-	4	DC OUTPUT +V
2	DC INPUT V+	5	DC OUTPUT -V
3	FG $\pm$		

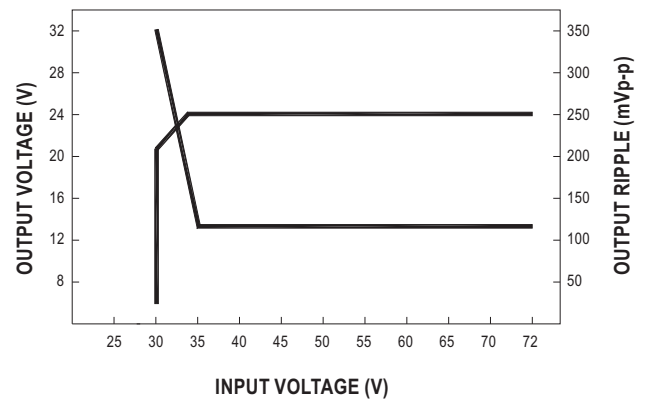
### Block Diagram



### Derating Curve



### Static Characteristics(SD-25C-24V)





## ■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage
- 1500VAC I/O isolation
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- Fixed switching frequency at 83KHz
- Low cost
- High reliability
- 2 years warranty

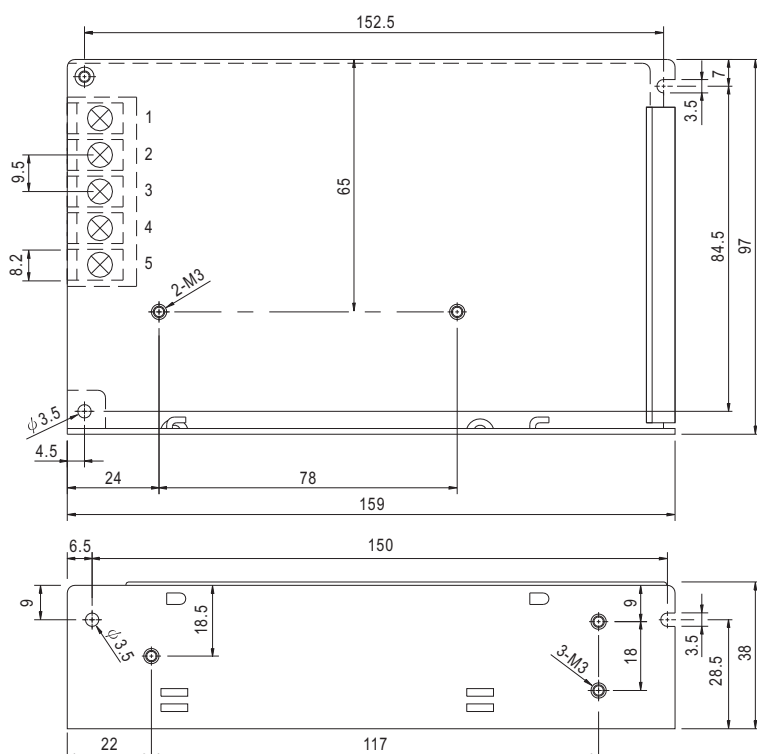


## SPECIFICATION

SPECIFICATION										
MODEL		SD-50A-5	SD-50B-5	SD-50C-5	SD-50A-12	SD-50B-12	SD-50C-12	SD-50A-24	SD-50B-24	SD-50C-24
OUTPUT	DC VOLTAGE	5V			12V			24V		
	RATED CURRENT	10A			4.2A			2.1A		
	CURRENT RANGE	0 ~ 10A			0 ~ 4.2A			0 ~ 2.1A		
	RATED POWER	50W			50.4W			50.4W		
	RIPPLE & NOISE (max.) <small>Note.2</small>	100mVp-p			120mVp-p			150mVp-p		
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC			11 ~ 16VDC			23 ~ 30VDC		
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.0%			±1.0%			±1.0%		
	LINE REGULATION	±0.5%			±0.3%			±0.2%		
	LOAD REGULATION	±0.5%			±0.3%			±0.2%		
	SETUP, RISE, HOLD UP TIME	2.5s, 50ms, ----- at full load								
INPUT	VOLTAGE RANGE	A:9.2 ~ 18VDC    B:19 ~ 36VDC    C:36 ~ 72VDC								
	EFFICIENCY (Typ.)	70%	73%	76%	72%	75%	78%	74%	80%	83%
	DC CURRENT	7A/12V	3A/24V	1.5A/48V	7A/12V	3A/24V	1.5A/48V	7A/12V	3A/24V	1.5A/48V
PROTECTION	OVERLOAD	105 ~ 150% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	5.75 ~ 6.75V/10% load			16.8 ~ 20V/10% load			31.5 ~ 37.5V/10% load Protection type : Hiccup mode, recovers automatically after fault condition is removed		
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to "Derating Curve")								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃ )								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC <small>(Note 4)</small>	SAFETY STANDARDS	Design refer to LVD								
	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 / 25℃ / 70% RH								
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B								
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8, EN55024, heavy industry level, criteria A								
OTHERS	MTBF	365.6K hrs min.(SD-50A)		357.5K hrs min.(SD-50B)		368.5K Hrs min.(SD-50C)		MIL-HDBK-217F (25℃)		
	DIMENSION	159*97*38mm (L*W*H)								
	PACKING	0.48Kg; 24pcs/12.7Kg/0.75CUFT								
NOTE	1. All parameters NOT specially mentioned are measured at 12,24,48VDC input, rated load and 25℃ 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. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )									

## Mechanical Specification

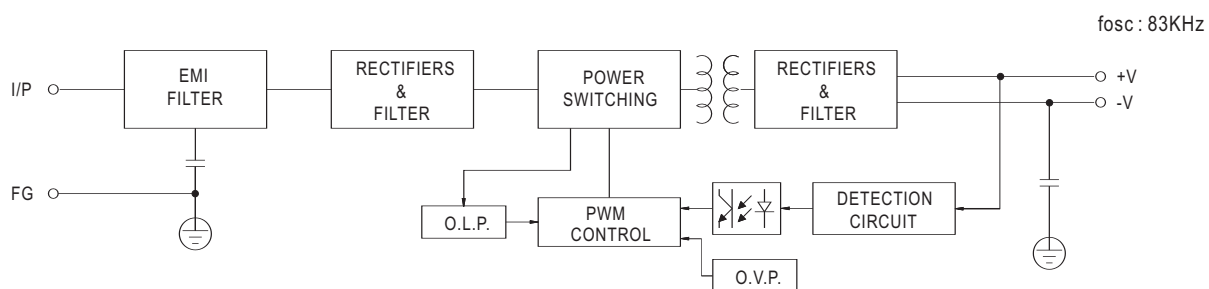
Case No. 901 Unit:mm



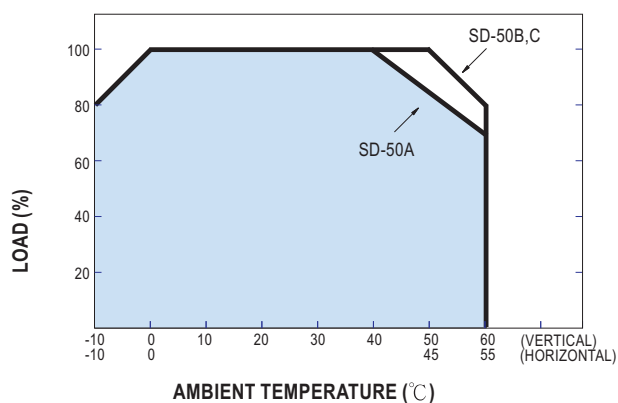
Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	DC INPUT V+	4	DC OUTPUT -V
2	DC INPUT V-	5	DC OUTPUT +V
3	FG $\perp$		

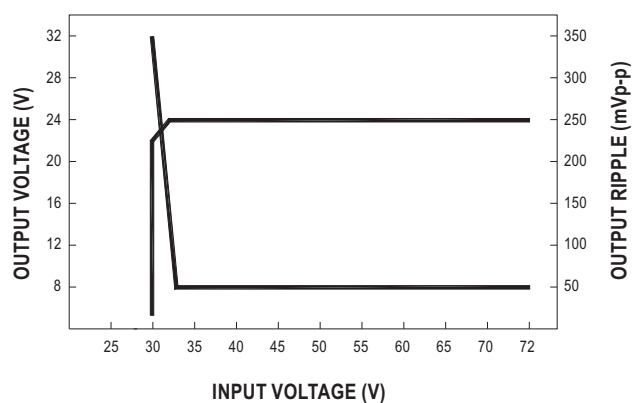
## Block Diagram

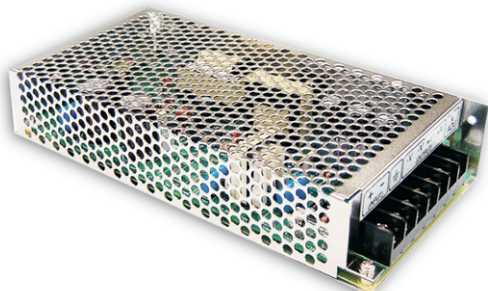


## Derating Curve



## Static Characteristics(SD-50C-24V)





#### ■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage
- 1500VDC I/O isolation
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- Fixed switching frequency at 83KHz
- 24V and 48V input voltage design refer to LVD
- Low cost
- High reliability
- 2 years warranty

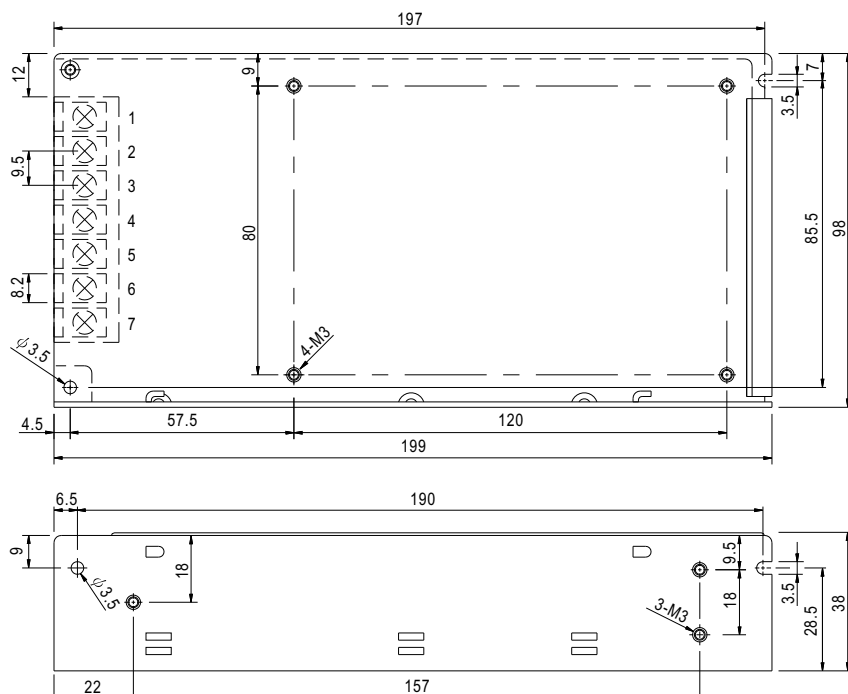
**CB** (for D type only) **CE**

#### SPECIFICATION

MODEL		SD-100B-5	SD-100C-5	SD-100D-5	SD-100B-12	SD-100C-12	SD-100D-12	SD-100B-24	SD-100C-24	SD-100D-24
OUTPUT	DC VOLTAGE	5V			12V			24V		
	RATED CURRENT	20A			8.5A			4.2A		
	CURRENT RANGE	0 ~ 20A			0 ~ 8.5A			0 ~ 4.2A		
	RATED POWER	100W			102W			100.8W		
	RIPPLE & NOISE (max.) <small>Note.2</small>	100mVp-p			120mVp-p			150mVp-p		
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC			11 ~ 16VDC			23 ~ 30VDC		
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.0%			±1.0%			±1.0%		
	LINE REGULATION	±0.5%			±0.3%			±0.2%		
	LOAD REGULATION	±0.5%			±0.3%			±0.2%		
	SETUP, RISE TIME	2s, 50ms(only D mode) at full load								
HOLD UP TIME (Typ.)	20ms(only D mode) at full load									
INPUT	VOLTAGE RANGE	B:19 ~ 36VDC    C:36 ~ 72VDC    D:72 ~ 144VDC or 85 ~ 132VAC								
	EFFICIENCY (Typ.)	74%	75%	76%	75%	77%	80%	78%	81%	83%
	DC CURRENT (Typ.)	4.8A/24V	2.4A/48V	1.8A/96V	4.8A/24V	2.4A/48V	1.8A/96V	4.8A/24V	2.4A/48V	1.8A/96V
	INRUSH CURRENT (Typ.)	D:18A/96VDC								
	LEAKAGE CURRENT	<0.75mA/120VAC(SD-100D)								
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	5.75 ~ 6.75V/10% load			16.8 ~ 20V/10% load			31.5 ~ 37.5V/10% load		
		Protection type : Hiccup mode, recovers automatically after fault condition is removed								
ENVIRONMENT	WORKING TEMP.	-10 ~ +60℃ (Refer to output load derating curve)								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃ )								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	IEC60950-1 CB approved by TUV (for D type only)								
	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 / 25℃ / 70% RH								
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22) Class B								
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,6,8; ENV50204, light industry level, criteria A								
OTHERS	MTBF	356.7K hrs min.(SD-100B)		355.5K hrs min.(SD-100C)		341.9K Hrs min.(SD-100D)		MIL-HDBK-217F (25℃)		
	DIMENSION	199*98*38mm (L*W*H)								
	PACKING	0.65Kg; 20pcs/13.8Kg/0.8CUFT								
NOTE	1. All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25℃ 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. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.									

## ■ Mechanical Specification

Case No. 902 Unit:mm



### Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1,2	INPUT ※	4,5	DC OUTPUT -V
3	FG $\frac{1}{2}$	6,7	DC OUTPUT +V

※ SD-100B,C

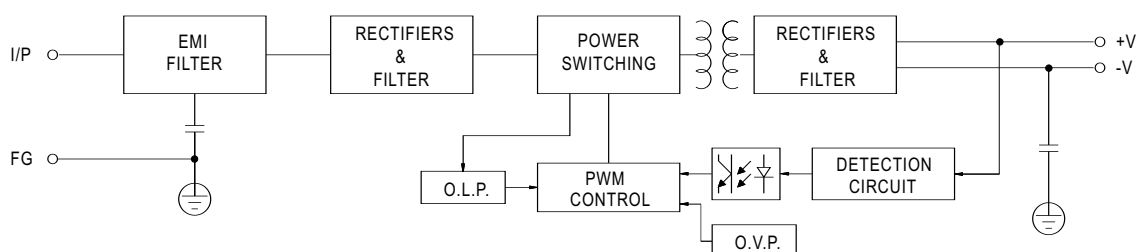
Pin No.	Assignment
1	DC INPUT V+
2	DC INPUT V-

※ SD-100D

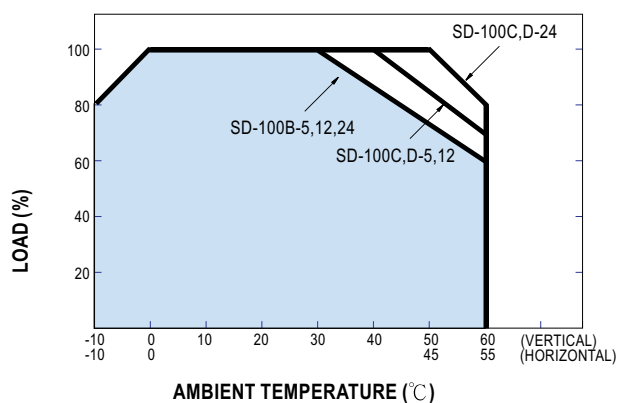
Pin No.	Assignment
1,2	AC/DC INPUT

### ■ Block Diagram

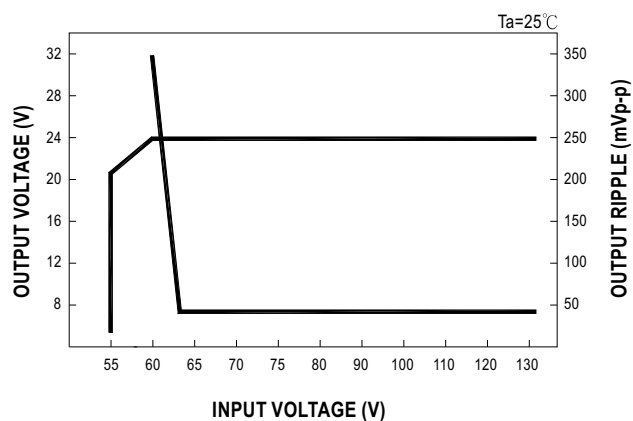
fosc : 83KHz



### Derating Curve



### ■ Static Characteristics(SD-100D-24V)







## 200W Single Output DC-DC Converter

## SD-200 series



### ■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 1500VAC I/O isolation
- Cooling by free air convection
- 100% full load burn-in test
- 24V and 48V input voltage design refer to LVD
- 2 years warranty

**UL** (for SD-200C-24 type only) **CB** (for D type only) **CE**

### SPECIFICATION

MODEL		SD-200B				SD-200C			
OUTPUT	DC VOLTAGE	5V	12V	24V	48V	5V	12V	24V	48V
	RATED CURRENT	34A	16.7A	8.4A	4.2A	40A	16.7A	8.4A	4.2A
	CURRENT RANGE	0 ~ 34A	0 ~ 16.7A	0 ~ 8.4A	0 ~ 4.2A	0 ~ 40A	0 ~ 16.7A	0 ~ 8.4A	0 ~ 4.2A
	RATED POWER	170W	200.4W	201.6W	201.6W	200W	200.4W	201.6W	201.6W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	200mVp-p	100mVp-p	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC	11 ~ 16VDC	23 ~ 30VDC	43 ~ 53VDC	4.5 ~ 5.5VDC	11 ~ 16VDC	23 ~ 30VDC	43 ~ 53VDC
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME		300ms, 50ms at full load							
INPUT	VOLTAGE RANGE	B:19 ~ 36VDC    C:36 ~ 72VDC    D:72 ~144VDC							
	EFFICIENCY (Typ.)	79%	82%	85%	86%	81%	84%	86%	86%
	DC CURRENT (Typ.)	10.8A/24V	10.6A/24V	10.4A/24V	10.4A/24V	5.4A/48V	5.2A/48V	6.7A/48V	5A/48V
	INRUSH CURRENT (Typ.)	C:45A/48VDC    D:45A/96VDC							
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Shut down o/p voltage, re-power on to recover							
	OVER VOLTAGE	5.75 ~ 6.75V	16.8 ~ 20V	31.5 ~ 37.5V	53 ~ 65V	5.75 ~ 6.75V	16.8 ~ 20V	31.5 ~ 37.5V	53 ~ 65V
		Protection type : Shut down o/p voltage, re-power on to recover							
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down							
ENVIRONMENT	WORKING TEMP.	-20 ~ +60℃ (Refer to "Derating Curve")							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes							
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1approved (for SD-200C-24 type only), IEC60950-1 CB approved by TUV (for D type only)							
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH							
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B							
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8, light industry level, criteria A							
OTHERS	MTBF	218.2K hrs min.    MIL-HDBK-217F (25℃)							
	DIMENSION	215*115*50mm (L*W*H)							
	PACKING	1.1Kg; 12pcs/14.4Kg/0.92CUFT							
NOTE	1. All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25℃ 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. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )								



#### ■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 1500VAC I/O isolation
- Cooling by free air convection
- 100% full load burn-in test
- 24V and 48V input voltage design refer to LVD
- 2 years warranty

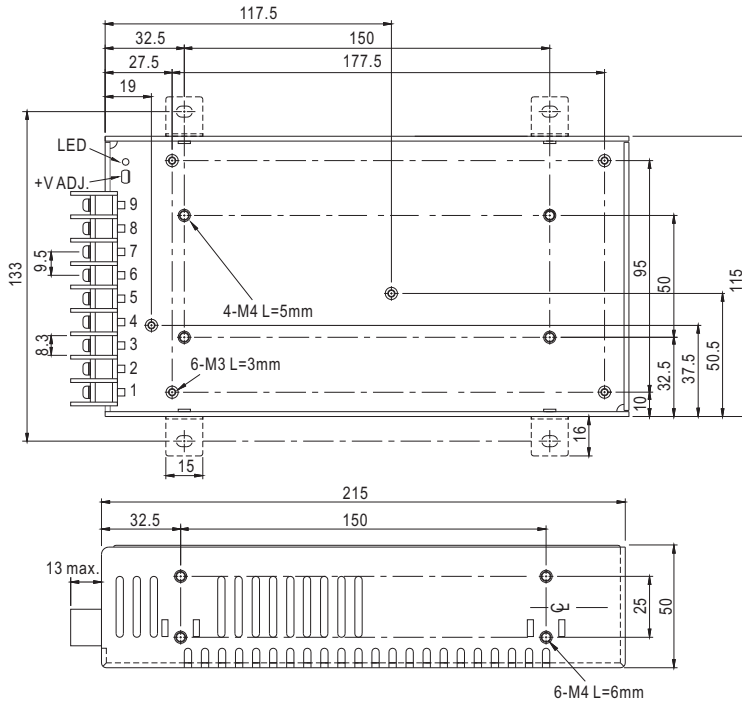
**CB** (for D type only) **CE**

#### SPECIFICATION

MODEL		SD-200D			
OUTPUT	DC VOLTAGE	5V	12V	24V	48V
	RATED CURRENT	40A	16.7A	8.4A	4.2A
	CURRENT RANGE	0 ~ 40A	0 ~ 16.7A	0 ~ 8.4A	0 ~ 4.2A
	RATED POWER	200W	200.4W	201.6W	201.6W
	RIPPLE & NOISE (max.) <small>Note.2</small>	100mVp-p	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC	11 ~ 16VDC	23 ~ 30VDC	43 ~ 53VDC
	VOLTAGE TOLERANCE <small>Note.3</small>	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME		300ms, 50ms at full load			
INPUT	VOLTAGE RANGE	B:19 ~ 36VDC    C:36 ~ 72VDC    D:72 ~144VDC			
	EFFICIENCY (Typ.)	82%	82%	84%	90%
	DC CURRENT (Typ.)	3.5A/96V	3.5A/96V	3.5A/96V	3.5A/96V
	INRUSH CURRENT (Typ.)	C:45A/48VDC    D:45A/96VDC			
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Shut down o/p voltage, re-power on to recover			
	OVER VOLTAGE	5.75 ~ 6.75V	16.8 ~ 20V	31.5 ~ 37.5V	53 ~ 65V
		Protection type : Shut down o/p voltage, re-power on to recover			
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down			
ENVIRONMENT	WORKING TEMP.	-20 ~ +60℃ (Refer to "Derating Curve")			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃ )			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	IEC60950-1 CB approved by TUV (for D type only)			
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH			
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B			
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8, light industry level, criteria A			
OTHERS	MTBF	218.2K hrs min.    MIL-HDBK-217F (25℃)			
	DIMENSION	215*115*50mm (L*W*H)			
	PACKING	1.1Kg; 12pcs/14.4Kg/0.92CUFT			
NOTE	1. All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25℃ 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. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )				

## Mechanical Specification

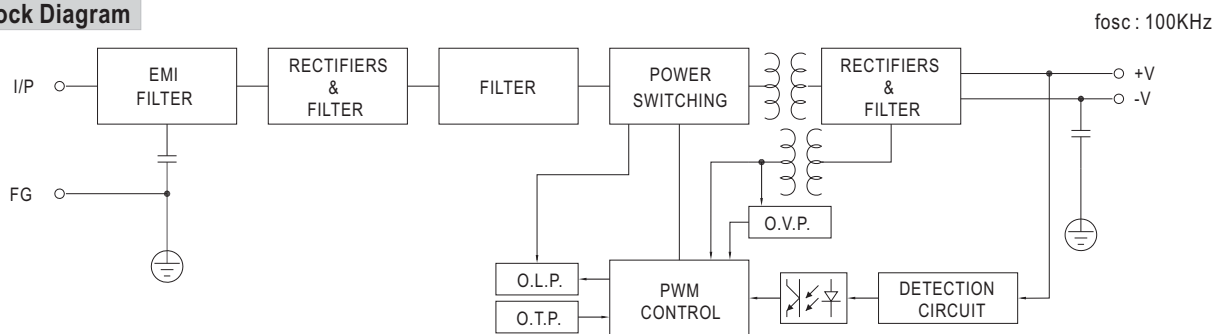
Case No. 912H Unit:mm



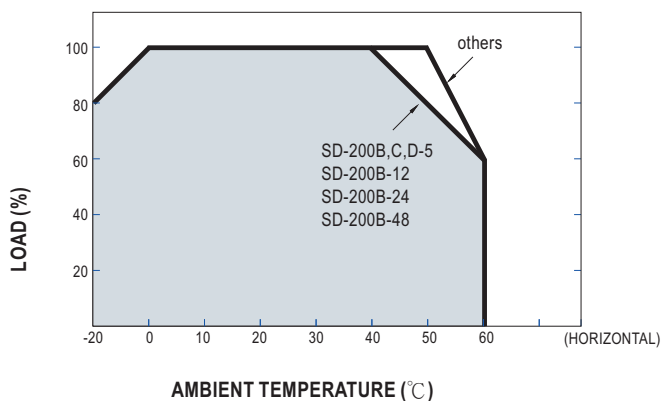
Terminal Pin No. Assignment :

Pin No.	Assignment	Pin No.	Assignment
1	DC INPUT V+	4,5,6	DC OUTPUT V-
2	DC INPUT V-	7,8,9	DC OUTPUT V+
3	FG $\perp$		

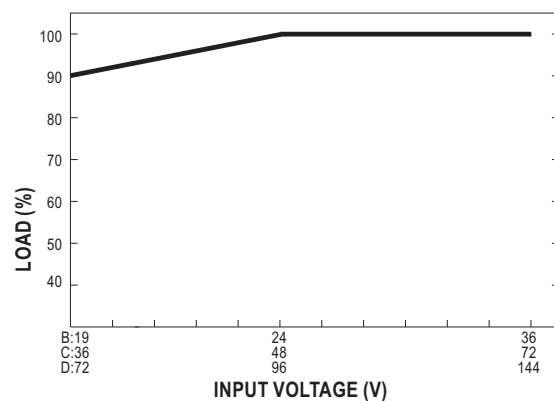
## Block Diagram



## Derating Curve



## Static Characteristics





#### ■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 1500VAC I/O isolation
- Forced air cooling by built-in DC Fan
- 100% full load burn-in test
- 24V and 48V input voltage design refer to LVD
- 2 years warranty

**CB** (for D type only) **CE**

#### SPECIFICATION

MODEL		SD-350B				SD-350C			
OUTPUT	DC VOLTAGE	5V	12V	24V	48V	5V	12V	24V	48V
	RATED CURRENT	57A	27.5A	14.6A	7.3A	60A	27.5A	14.6A	7.3A
	CURRENT RANGE	0 ~ 57A	0 ~ 27.5A	0 ~ 14.6A	0 ~ 7.3A	0 ~ 60A	0 ~ 27.5A	0 ~ 14.6A	0 ~ 7.3A
	RATED POWER	285W	330W	350.4W	350.4W	300W	330W	350.4W	350.4W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	200mVp-p	100mVp-p	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC	11 ~ 16VDC	23 ~ 30VDC	43 ~ 53VDC	4.5 ~ 5.5VDC	11 ~ 16VDC	23 ~ 30VDC	43 ~ 53VDC
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.3%	±0.2%	±0.2%	±0.5%	±0.3%	±0.2%	±0.2%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME		300ms, 50ms at full load							
INPUT	VOLTAGE RANGE	B:19 ~ 36VDC    C:36 ~ 72VDC    D:72 ~ 144VDC							
	EFFICIENCY (Typ.)	74%	80%	80%	84%	76%	81%	81%	82%
	DC CURRENT (Typ.)	14.4A/24V	16A/24V	17.6A/24V	17.6A/24V	7.6A/48V	8.8A/48V	9.0A/48V	9.0A/48V
	INRUSH CURRENT (Typ.)	C:45A/48VDC    D:45A/96VDC							
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Shut down o/p voltage, re-power on to recover							
	OVER VOLTAGE	5.75 ~ 6.75V	16.8 ~ 20V	31.5 ~ 37.5V	53 ~ 65V	5.75 ~ 6.75V	16.8 ~ 20V	31.5 ~ 37.5V	53 ~ 65V
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down							
	WORKING TEMP.	-20 ~ +60°C (Refer to "Derating Curve")							
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)							
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes							
SAFETY & EMC (Note 4)	SAFETY STANDARDS	IEC60950-1 CB approved by TUV (for D type only)							
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH							
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B							
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8, light industry level, criteria A							
	MTBF	209.4K hrs min.    MIL-HDBK-217F (25°C)							
	DIMENSION	215*115*50mm (L*W*H)							
	PACKING	1.1Kg; 12pcs/14.4Kg/0.92CUFT							
NOTE		1. All parameters NOT specially mentioned are measured at 24,48,96VDC 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. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to EMI testing of component power supplies. (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )							



#### ■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature
- 1500VAC I/O isolation
- Forced air cooling by built-in DC Fan
- 100% full load burn-in test
- 24V(B) and 48V(C) input voltage design refer to LVD
- 2 years warranty

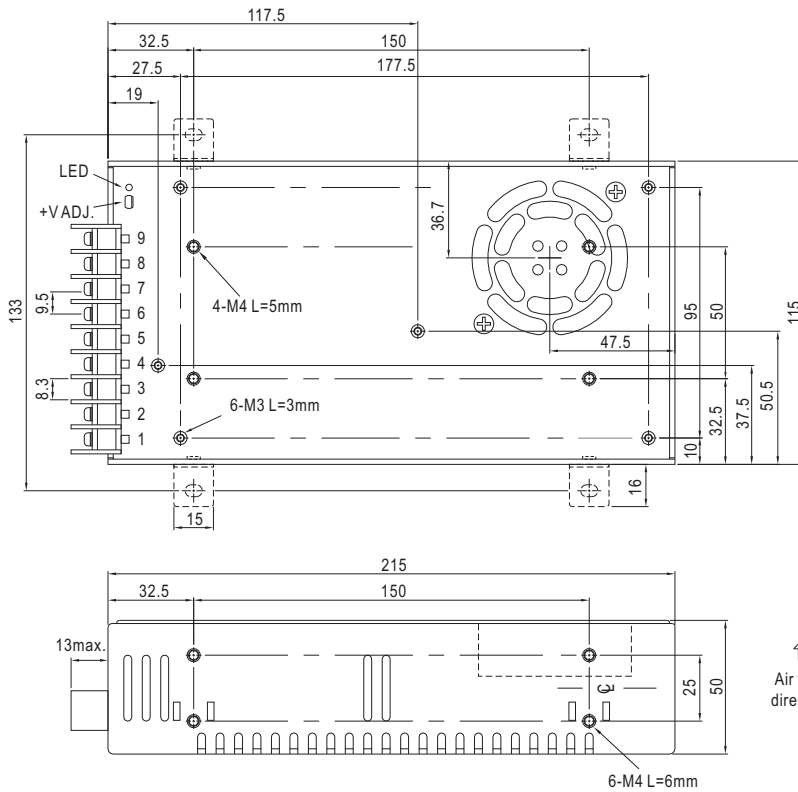
**CB** (for D type only) **CE**

#### SPECIFICATION

MODEL		SD-350D			
OUTPUT	DC VOLTAGE	5V	12V	24V	48V
	RATED CURRENT	60A	29.2A	14.6A	7.3A
	CURRENT RANGE	0 ~ 60A	0 ~ 29.2A	0 ~ 14.6A	0 ~ 7.3A
	RATED POWER	300W	350.4W	350.4W	350.4W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC	11 ~ 16VDC	23 ~ 30VDC	43 ~ 53VDC
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.3%	±0.2%	±0.2%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%	±1.0%
SETUP, RISE TIME		300ms, 50ms at full load			
INPUT	VOLTAGE RANGE	B:19 ~ 36VDC    C:36 ~ 72VDC    D:72 ~144VDC			
	EFFICIENCY (Typ.)	78%	83%	87%	89%
	DC CURRENT (Typ.)	6A/96V	6A/96V	6A/96V	6A/96V
	INRUSH CURRENT (Typ.)	C:45A/48VDC    D:45A/96VDC			
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Shut down o/p voltage, re-power on to recover			
	OVER VOLTAGE	5.75 ~ 6.75V	16.8 ~ 20V	31.5 ~ 37.5V	53 ~ 65V
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down			
	WORKING TEMP.	-20 ~ +60℃ (Refer to "Derating Curve")			
ENVIRONMENT	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	IEC60950-1 CB approved by TUV (for D type only)			
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC    I/P-FG:2KVAC    O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH			
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B			
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8, light industry level, criteria A			
	MTBF	209.4K hrs min.    MIL-HDBK-217F (25℃)			
	DIMENSION	215*115*50mm (L*W*H)			
	PACKING	1.1Kg; 12pcs/14.4Kg/0.92CUFT			
NOTE	1. All parameters NOT specially mentioned are measured at 24,48,96VDC input, rated load and 25 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. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to EMI testing of component power supplies. (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> )				

## Mechanical Specification

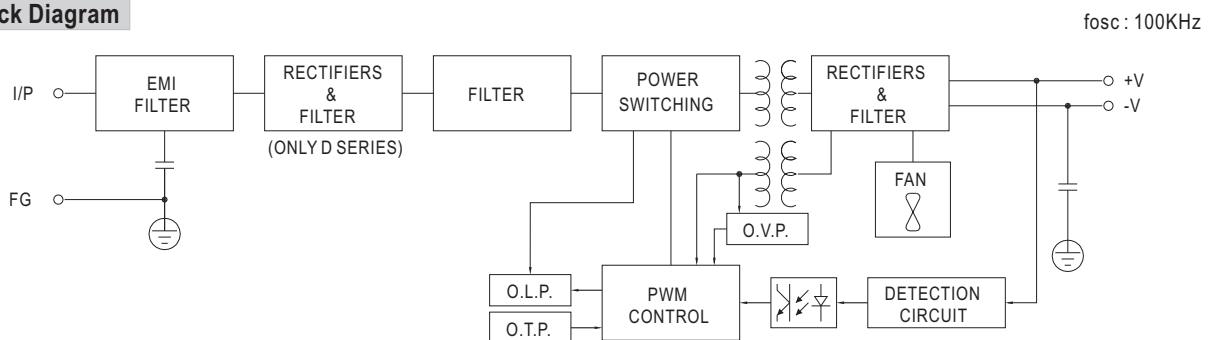
Case No. 912B Unit:mm



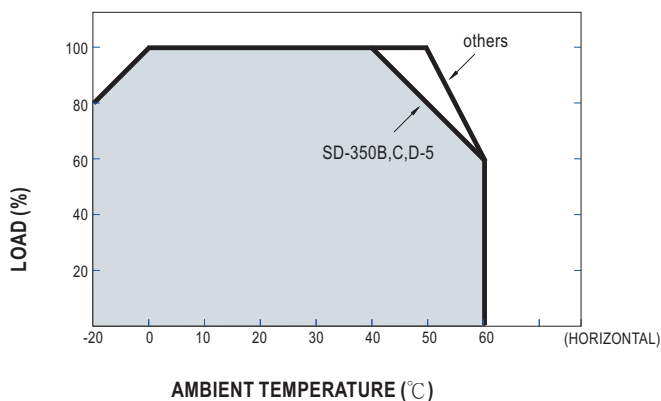
Terminal Pin No. Assignment :

Pin No.	Assignment	Pin No.	Assignment
1	DC INPUT V+	4,5,6	DC OUTPUT V-
2	DC INPUT V-	7,8,9	DC OUTPUT V+
3	FG $\perp$		

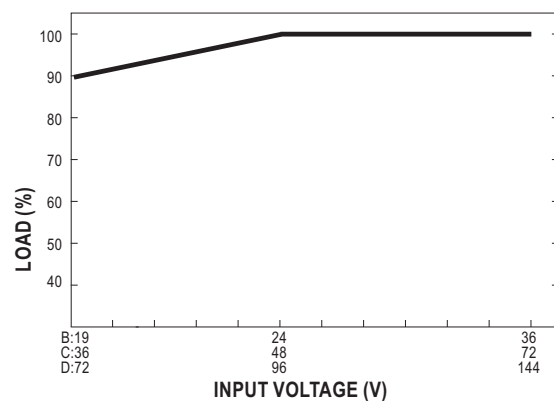
## Block Diagram



## Derating Curve



## Static Characteristics





## 500W Single Output DC-DC Converter

## SD-500 series



### ■ Features :

- DC input active surge current limiting
- Wide 4:1~2:1 DC input range (24V: 19~72VDC, 96V:72~144VDC)
- Protections: Short circuit / Overload / Over voltage / Over temperature / Input polarity(by fuse)
- 2000VAC I/O Isolation
- Forced air cooling by built-in DC fan with fan speed control function
- Output OK Signal
- Built-in remote ON-OFF control
- Built-in remote sense function
- 3 years warranty

CB CE

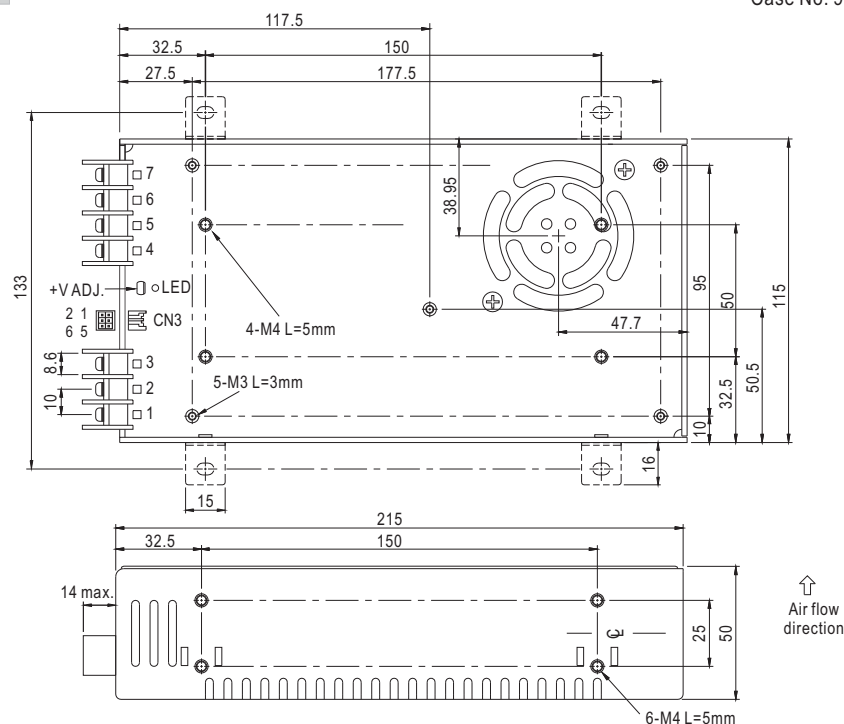
### SPECIFICATION

MODEL		SD-500L-12	SD-500L-24	SD-500L-48	SD-500H-12	SD-500H-24	SD-500H-48
OUTPUT	DC VOLTAGE	12V	24V	48V	12V	24V	48V
	RATED CURRENT	40A	21A	10.5A	40A	21A	10.5A
	CURRENT RANGE	0 ~ 40A	0 ~ 21A	0 ~ 10.5A	0 ~ 40A	0 ~ 21A	0 ~ 10.5A
	RATED POWER	480W	504W	504W	480W	504W	504W
	RIPPLE & NOISE (max.) <small>Note.2</small>	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	11 ~ 15V	23 ~ 30V	46 ~ 60V	11 ~ 15V	23 ~ 30V	46 ~ 60V
	VOLTAGE TOLERANCE <small>Note.3</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
SETUP, RISE TIME		500ms, 50ms at full load					
INPUT	VOLTAGE RANGE <small>Note.5</small>	19 ~ 72VDC			72 ~ 144VDC		
	EFFICIENCY (Typ.)	86%	88%	89%	87%	89%	90%
	DC CURRENT (Typ.)	24.2A/19VDC	24.8A/24VDC	12A/48VDC	8A/72VDC	6A/96VDC	
	CURRENT (AT NO LOAD)	Max. 0.2A/48VDC			Max. 0.1A/96VDC		
	INRUSH CURRENT (Typ.)	60A/48VDC			60A/96VDC		
PROTECTION	OVERLOAD	105 ~ 125% rated output power Protection type : Constant current limiting, shut down o/p voltage after about 5 sec., re-power on to recover					
	OVER VOLTAGE	16 ~ 19V	30.8 ~ 35.2V	62 ~ 68V	16 ~ 19V	30.8 ~ 35.2V	62 ~ 68V
		Protection type : Shut down o/p voltage, re-power on to recover					
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down					
FUNCTION	REMOTE ON/OFF CONTROL	Please refer to function manual					
	OUTPUT OK SIGNAL	Open collector signal low when PSU turns on, max. sink current : 10mA					
ENVIRONMENT	WORKING TEMP.	-20 ~ +60℃ (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.02%/℃ (0 ~ 50℃)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 4)	SAFETY STANDARDS	IEC60950-1 CB approved by TUV					
	WITHSTAND VOLTAGE	I/P-O/P:2KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃ / 70% RH					
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,6,8, light industry level, criteria A					
OTHERS	MTBF	196.3K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	215*115*50mm (L*W*H)					
	PACKING	1.15Kg; 12pcs/14.8Kg/0.92CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 48, 96VDC input, rated load and 25℃ 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. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a> ) 5. Derating may be needed under low input voltages. Please check the derating curve for more details.						



## Mechanical Specification

Case No. 912A Unit:mm



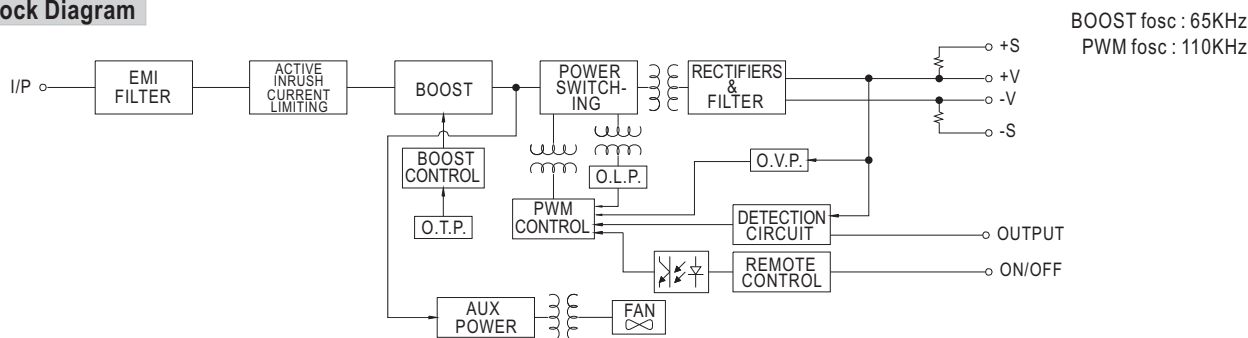
DC Input Terminal Pin No. Assignment

Pin No.	Assignment	Pin No.	Assignment
1	DC INPUT V+	4,5	-V
2	DC INPUT V-	6,7	+V
3	FG $\pm$		

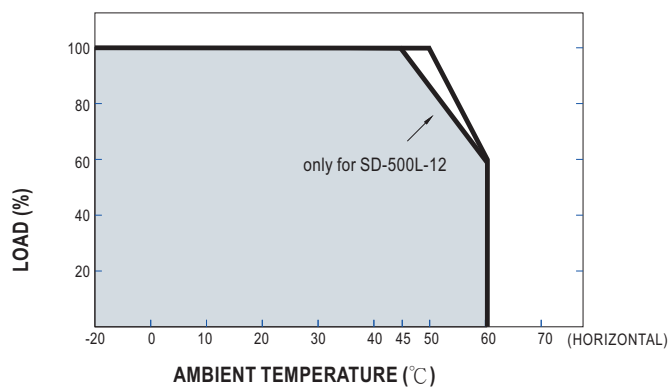
Control Pin No. Assignment (CN3) : HRS DF11-6DP-2DS or equivalent

Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1	+S	4	GND	HRS DF11-6DS or equivalent	JST SPHD-002T-P0.5 or equivalent
2	-S	5	RC		
3	OUTPUT OK	6	RCG		

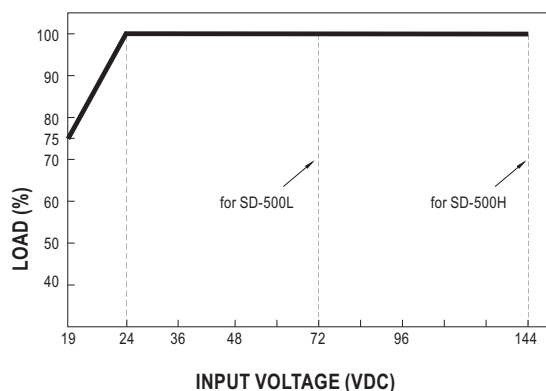
## Block Diagram



## Derating Curve



## Static Characteristics





## Function Description of CN3

Pin No.	Function	Description
1	+S	Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
2	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
3	O/P OK	Open collector signal, reference to pin4(GND). Low when PSU turns on. The maximum sink current is 10mA and the maximum external voltage is 13V.
4	GND	These pins connect to the negative terminal (-V).
5	RC	Remote ON/OFF
6	RCG	Remote ON/OFF ground

## Function Manual

### 1.Remote ON/OFF

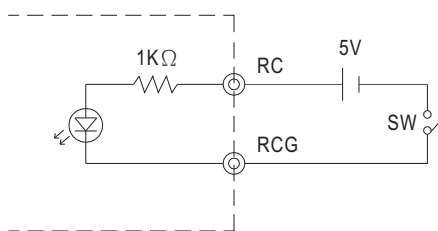
- (1)Remote ON/OFF control becomes available by applying voltage in CN3
- (2)Table 1.1 shows the specification of Remote ON/OFF function
- (3)Fig.1.2 shows the example to connect Remote ON/OFF control function

Table 1.1 Specification of Remote ON/OFF

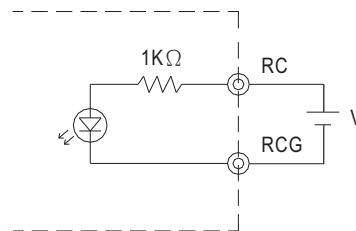
Connection Method	Fig. 1.2(A)	Fig. 1.2(B)
Output on	SW Open	V=0~0.8Vdc
Output off	SW Close	V=4~10Vdc

Fig.1.2 Examples of connecting remote ON/OFF

(A)Using external voltage source



(B)Using external voltage source



### 2.Output OK signal

"Output OK" is an open collector signal.

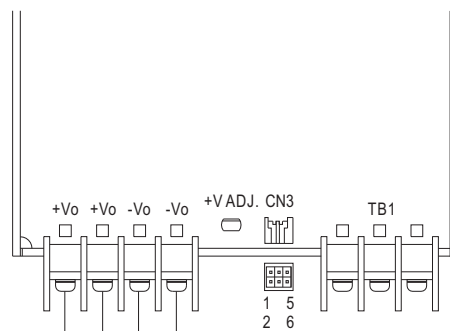
It indicates the output status of the PSU. It can operate in two ways : One is sinking current from external signal ; the other is sending out a voltage signal.

#### 2-1 Sink current :

The maximum sink current is 10mA and the maximum external voltage is 13V.

#### 2-2 Voltage signal :

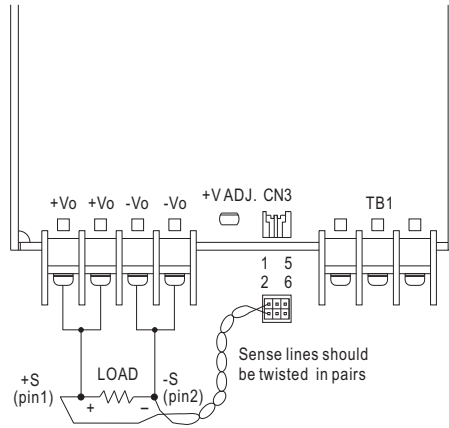
Between O/P OK(pin3) and GND(pin4)	Output Status
0 ~ 0.5V	ON
12 ~ 13V	OFF



1	CN3	5
+S	O/P OK	RC
-S	GND	RCG
2		6

### 3.Remote Sense

The remote sensing compensates voltage drop on the load wiring up to 0.5V.



1	CN3	5
+S	O/P OK	RC
-S	GND	RCG
2		6



#### ■ Features :

- 1U low profile 41mm
- High power density 10.7w/inch<sup>3</sup>
- 2000VAC I/O Isolation
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Output OK signal
- Built-in remote ON-OFF control
- Built-in remote sense function
- Forced air cooling by built-in DC fan with fan speed control
- 12V, 0.25A auxiliary output
- 3 years warranty

CB CE

#### SPECIFICATION

MODEL		SD-1000L-12	SD-1000L-24	SD-1000L-48	SD-1000H-12	SD-1000H-24	SD-1000H-48
OUTPUT	DC VOLTAGE	12V	24V	48V	12V	24V	48V
	RATED CURRENT	60A	40A	21A	60A	40A	21A
	CURRENT RANGE	0 ~ 60A	0 ~ 40A	0 ~ 21A	0 ~ 60A	0 ~ 40A	0 ~ 21A
	RATED POWER	720W	960W	1008W	720W	960W	1008W
	RIPPLE & NOISE (max.) <small>Note.2</small>	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	11 ~ 15V	23 ~ 30V	46 ~ 60V	11 ~ 15V	23 ~ 30V	46 ~ 60V
	VOLTAGE TOLERANCE <small>Note.3</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	500ms, 50ms at full load					
INPUT	VOLTAGE RANGE <small>Note.5</small>	19 ~ 72VDC			72 ~ 144VDC		
	EFFICIENCY (Typ.)	84%	88%	90%	85%	89%	92%
	DC CURRENT (Typ.)	23.5A/48VDC			11.6A/96VDC		
	INRUSH CURRENT (Typ.)	-----			100A/96VDC		
PROTECTION	OVERLOAD	105 ~ 125% rated output power Protection type : Constant current limiting, unit will shut down o/p voltage after about 5sec. Re-power on to recover					
	OVER VOLTAGE	16 ~ 19V	30.8 ~ 35.2V	62 ~ 68V	16 ~ 19V	30.8 ~ 35.2V	62 ~ 68V
	OVER TEMPERATURE	85℃ ±5℃ (TSW2) detect on heatsink of O/P diode; 75℃ ±5℃ (TSW1) detect on heatsink of power transistor Protection type : Shut down o/p voltage, recovers automatically after temperature goes down					
FUNCTION	REMOTE ON/OFF CONTROL	Please refer to function manual					
	OUTPUT OK SIGNAL	Open collector signal low when PSU turns on, maximum, sink current :10mA					
ENVIRONMENT	WORKING TEMP.	-20 ~ +60℃ (Refer to output load derating curve)					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.02%/℃ (0 ~ 50℃)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC <small>(Note 4)</small>	SAFETY STANDARDS	IEC60950-1 CB approved by TUV					
	WITHSTAND VOLTAGE	I/P-O/P:2KVAC 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 25℃ 70%RH					
	EMI CONDUCTION & RADIATION	Compliance to EN55022 (CISPR22)					
	EMS IMMUNITY	Compliance to EN61000-4-2,3,4,6,8; ENV50204, light industry level, criteria A					
OTHERS	MTBF	32K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	295*127*41mm (L*W*H)					
	PACKING	1.94Kg; 6pcs/12.6Kg/0.99CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 48, 96VDC input, rated load and 25℃ 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. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 5. Derating may be needed under low input voltages. Please check the derating curve for more details.						

## Function Description of CN51

Pin No.	Function	Description
1	+S	Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
2	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
3	O/P OK	Open collector signal, referenced to pin4(GND). Low when PSU turns on. The maximum sink current is 10mA and the maximum external voltage is 13V.
4	GND	These pins connect to the negative terminal (-V).
5	AUX	Auxiliary voltage output, 10.8~13.2V referenced to pin6(AUXG).The maximum load current is 0.25A.
6	AUXG	Auxiliary voltage output ground. The signal return is isolated from the output terminals(+V & -V).
7	RC1	Remote ON/OFF
8	RC2	Remote ON/OFF
9	RCG	Remote ON/OFF ground
10	NC	No connection

## Function Manual

### 1.Remote ON/OFF

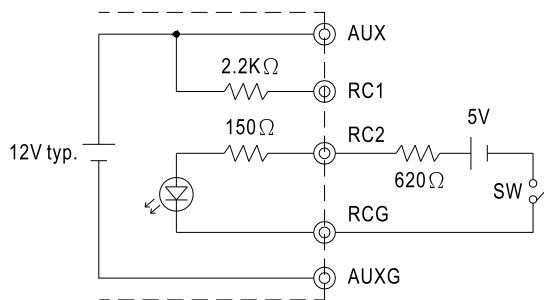
- (1)Remote ON/OFF control becomes available by applying voltage in CN51
- (2)Table 1.1 shows the specification of Remote ON/OFF function
- (3)Fig.1.2 shows the example to connect Remote ON/OFF control function

Table 1.1 Specification of Remote ON/OFF

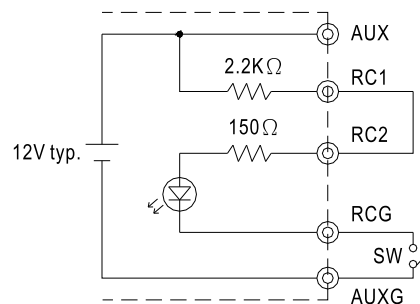
Connection Method	Fig. 1.2(A)	Fig. 1.2(B)	Fig. 1.2(C)
SW Logic	Output on	SW Open	SW Close
	Output off	SW Close	SW Open

Fig.1.2 Examples of connecting remote ON/OFF

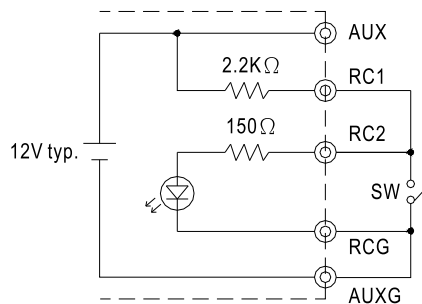
(A)Using external voltage source



(B)Using internal 12V auxiliary output

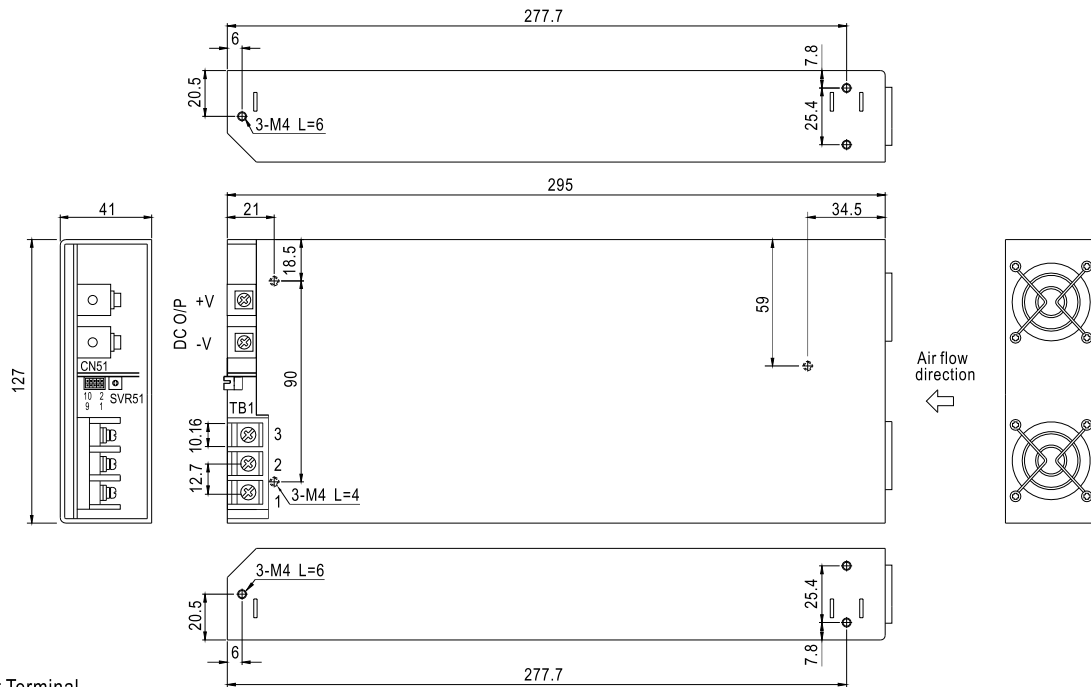


(C)Using internal 12V auxiliary output



## Mechanical Specification

Case No. 952B Unit:mm

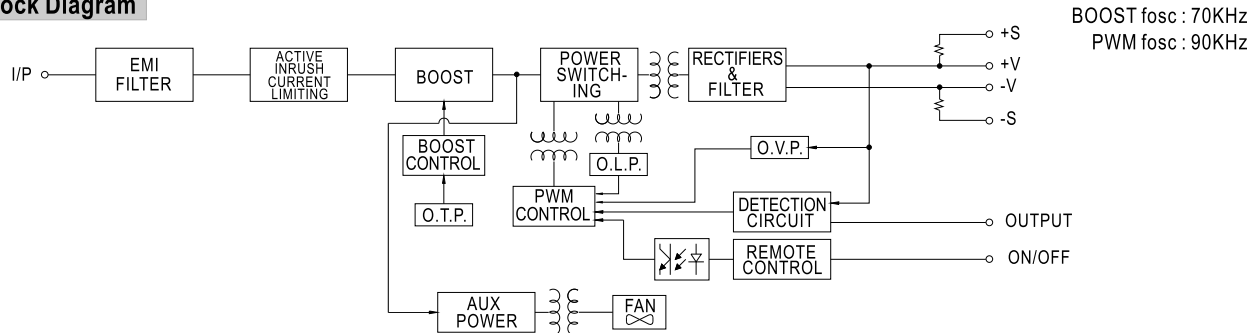

DC Input Terminal  
Pin No. Assignment

Pin No.	Assignment
1	DC INPUT V+
2	DC INPUT V-
3	FG $\perp$

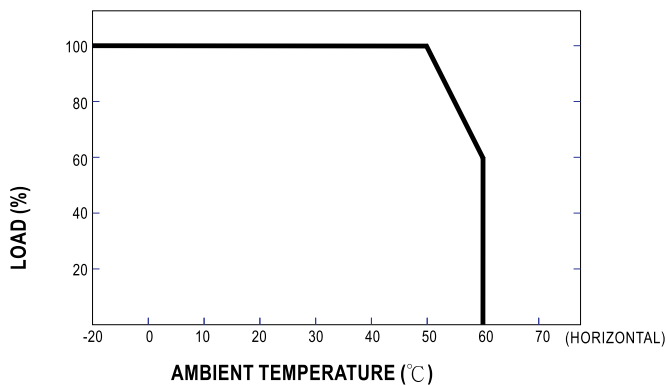
Control pin number assignment (CN51) : JST B10B-PHDSS or equivalent

Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1	+S	5	AUX	9	RCG	JST PHDR-10VS or equivalent	JST SPHD-002T-P0.5 or equivalent
2	-S	6	AUXG	10	NC		
3	OUTPUT OK	7	RC1				
4	GND	8	RC2				

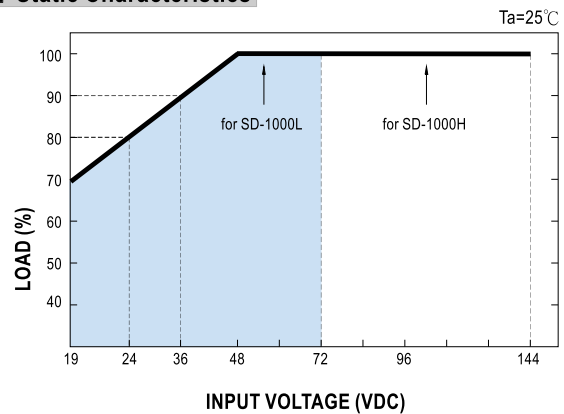
## Block Diagram



## Derating Curve



## Static Characteristics



## 2. Output OK signal

"Output OK" is an open collector signal.

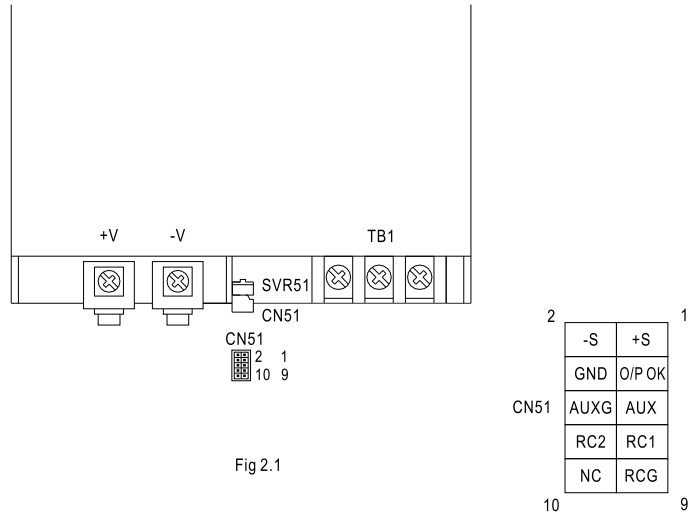
It indicates the output status of the PSU. It can operate in two ways : One is sinking current from external signal ; the other is sending out a voltage signal.

### 2-1 Sink current :

The maximum sink current is 10mA and the maximum external voltage is 13V.

### 2-2 Voltage signal :

Between O/P OK(pin3) and GND(pin4)	Output Status
0 ~ 0.5V	ON
12 ~ 13V	OFF



## 3. Remote Sense

The remote sensing compensates voltage drop on the load wiring up to 0.5V.

