



Key features

- Very low ripple:15mV, low noise
- Over load and short circuit protection
- High efficiency ,high density, fine quality and low price
- Industrial design
- Lower power, RoSH , no-load loss less than 0.5W
- 100% test and work
- 3 Years product warranty

Electrical specifications

Model	Input voltage	Output Power(W)	Output voltage(V)	Output current(A)	Ripple(mv)	Efficiency (%)
CDP05-36S03	15.6~ 57.6VDC	6.6	3.3	1	50	74
CDP05-36S05	15.6~ 57.6VDC	5	5.0	1	50	75
CDP05-36S09	15.6~ 57.6VDC	10.8	9.0	0.5	50	76
CDP05-36S12	15.6~ 57.6VDC	10.8	12	1.4	50	78
CDP05-36S13	15.6~ 57.6VDC	10.5	13	0.3	50	80
CDP05-36S24	15.6~ 57.6VDC	10.8	24	0.2	50	82

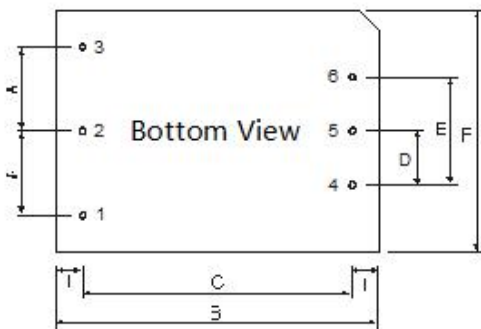
General features

Output	Output voltage accuracy	±2.0%
	Source effect	±1.0%
	Load effect	±1.0%
	Starting time (TYP)	20ms/230VAC 50ms/115VAC at full load
	Output hold time (TYP)	40ms/230VAC 15ms/115VAC at full load
Input	Input voltage range	15.6~ 57.6VDC
	Input frequency range	47 ~ 440Hz
	Input current (TYP)	230mA / 115VAC 120m A / 230VAC
	Inrush current (TYP)	cold boot 20 A / 115 VAC 40 A / 230 VAC
	Recommended values for External Fuses	T2A / 250Vac (disconnected slowly)
	Leakage current (TYP)	< 1mA at 230VAC/50Hz
Protection	Over voltage, over current, short circuit protection ; recovers automatically after fault condition is removed.	
Work environment	Operating Temperature	-40 ~ +70 °C (According to the output load derating curve to use)
	Humidity	85% .RH max
	Storage Temperature	-40 ~ +85, 10 ~ 95% RH
	Temperature coefficient	0.03%/ (0~ 50°C)
	Vibration coefficient	10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes
Safety and EMC (Note:3)	Safety Standard	UL1012,EN60950,UL60950
	I/O-Isolation voltage	I/P-O/P:3.0KVAC 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°C 70% RH



	EMI / RFI conducted	EN55011, EN55022 (CISPR22)
	ESD	IEC/EN 61000-4-2 level 4 8kV/15kV (Note: See the application circuit for details)
	RF	IEC/EN 61000-4-3 (Note: See the application circuit for details)
	EFT	IEC/EN 61000-4-4 level 4 4kV (Note: See the application circuit for details)
	SURGE	IEC/EN 61000-4-5 level 4 2kV
Others	MTBF	200K hrs min. MIL-HDBK-217F(25)
	Dimension	55*45*21mm (L*W*H)
Notes	1. Unless otherwise indicated of the above data,Our products are tested in the condition of TA=25ooc, humidity <75% ,230Vac nominal voltage input and rated load output.	
	2. Ripple & noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.	
	3. 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.	

Dimension



European Projection Diagram

	Dimension	Pin	Pin function
A	17.5	1	FG
B	55.0	2	AC(N)
C	47.0	3	AC(L)
D	10.0		
E	20.0	4	-Vo
F	45.0	5	No Pin
G	21.0	6	+Vo
I	≥4.0		

Note :

Dimension : mm

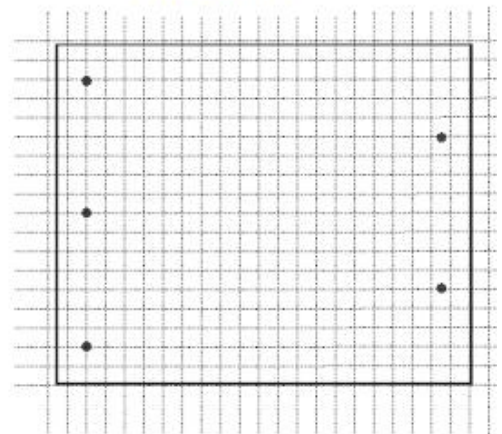
Pin section size:1.00mm

Pin tolerance:±0.1mm

Unmarked tolerance:±0.5mm

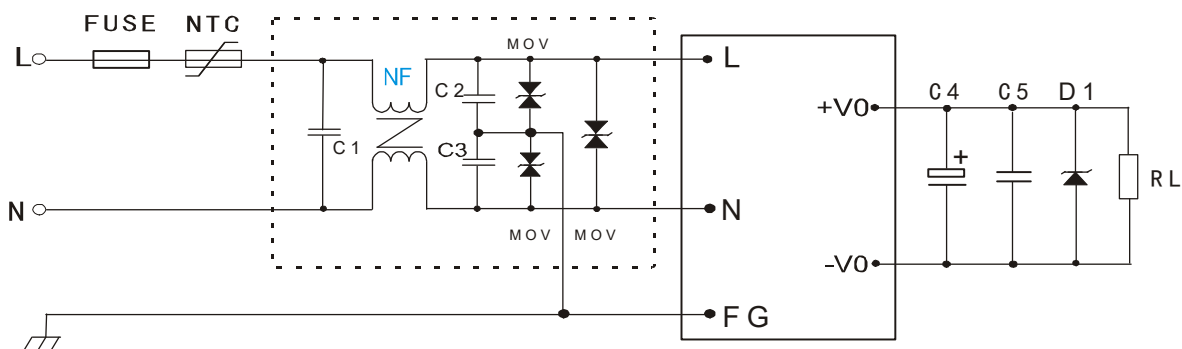
Module weight:70g(TYP)

PCB LAYOUT



Note: each cell in the graph is 2.54mm (100mil)

Typical application diagram





Remarks :

- 1.The output filter capacitor C4 is electrolytic capacitor, recommend using of high frequency and low resistance of electrolytic capacitors , the capacity and the current flowing-through need refer to the technical specifications provided by the manufacturer. Capacitance voltage downgrade is greater than 80% .C5 is use to remove high frequency noise.TVS D1 is used for protecting flow-up circuit (when module be abnormal) and recommended to use.
- 2.EMC filter used in the dashed box is to meet the higher requirements , if it is used in general applications , it can be omitted.

Typical values of external circuit components

Component Model	FUSE	NTC	NF	MOV	C1	C2,C3	C4	C5	D1
CDP05-S03	T3.15A/250V	Recommended external NTC thermal resistor , model : 10D-9	NF is a common mode inductance , the inductance value of 2-10mH, current \geq 0.7A	MOV is a piezoelectric resistor , recommended value is 14D471K	CX is the safety capacitor , 104K/275V	C2, C3 safety Y capacitor 102K/400Vac	470uF/16V	104K/50V (ceramic capacitor)	P6KE6.8A
CDP05-S05							470uF/16V		P6KE6.8A
CDP05-S09							150uF/16V		P6KE16A
CDP05-S12							120uF/16V		P6KE16A
CDP05-S15							120uF/25V		P6KE20A
CDP05-S24							100uF/35V		P6KE33A



Zhongyiguang Guangzhou Technology Ltd

✉ : vice@zygkj.com

☎ : +86(20) 3287 4481 / 2292 1551

📍 : NO.2, building 4, NO.8, DouTang Road, YongHe Economic Zone, GuangZhou City, P. R. China