Product Characteristics

- Input voltage range: 18V-40V
- Output voltage range: 75%-110%Vout
- Efficiency≥87%
- Over-voltage, over-current, short-circuit and over-temperature protection
- Interior patch design
- International standard pin mode
- Three years warranty period

Product Overview

The power module of this model is 18V-40V range input, with a maximum power of 500W and an efficiency of 87%, with input undervoltage and output overvoltage Output overcurrent, output short circuit and over-temperature protection and other protection functions;

Application

The power supply uses an advanced control topology circuit, with advanced power Processing control and packaging technology, with high effi ciency, high power density Degree, low noise and other advantages; with input overvoltage protect ion, output Overcurrent protection, over-tempera ture protection and other functions;

Absolute rating	Metric	Unit
Voltage between the + IN and the-IN	0.5～50	V
Voltage between the PC and the-IN	0.5～7.0	V
Voltage between PR and-IN	0.5～7.0	V
Voltage between SC and-OUT	0.5～1.5	V
The + OUT and the-OUT voltage	0.5～62.9	V

Product Naming

CFMV	24	A	48	X	500	B	-	X
Changfeng MV series standard brick power supply	Input Voltage 24：18~40V	A:full brick B:1/2 brick C:1/4 brick	Output voltage 48：48V	M：T_C :-55~100℃ T_S :-65~100℃ H: T_C :-40~100℃ T_S :-55~100℃ T：T_C :-40~100℃ T_S :-40~100℃	output power 500：500W	B:Standard version		Default: non-domestic G: National production

Input Characteristic

Parameter	Least value	Typical value	Crest value	Uuit	Working conditions
No-load state input power consumption			12	W	Tc=25℃
Disable the state input power consumption			4.5	W	Vpc≤2.3V
Input surge voltage			50	V	Tc=25℃,100ms,the full load
Input underpressure	14.0	15.5	17.9	V	The full load
Input overpressure	40.5	42.2	43.5	V	Carrying idler

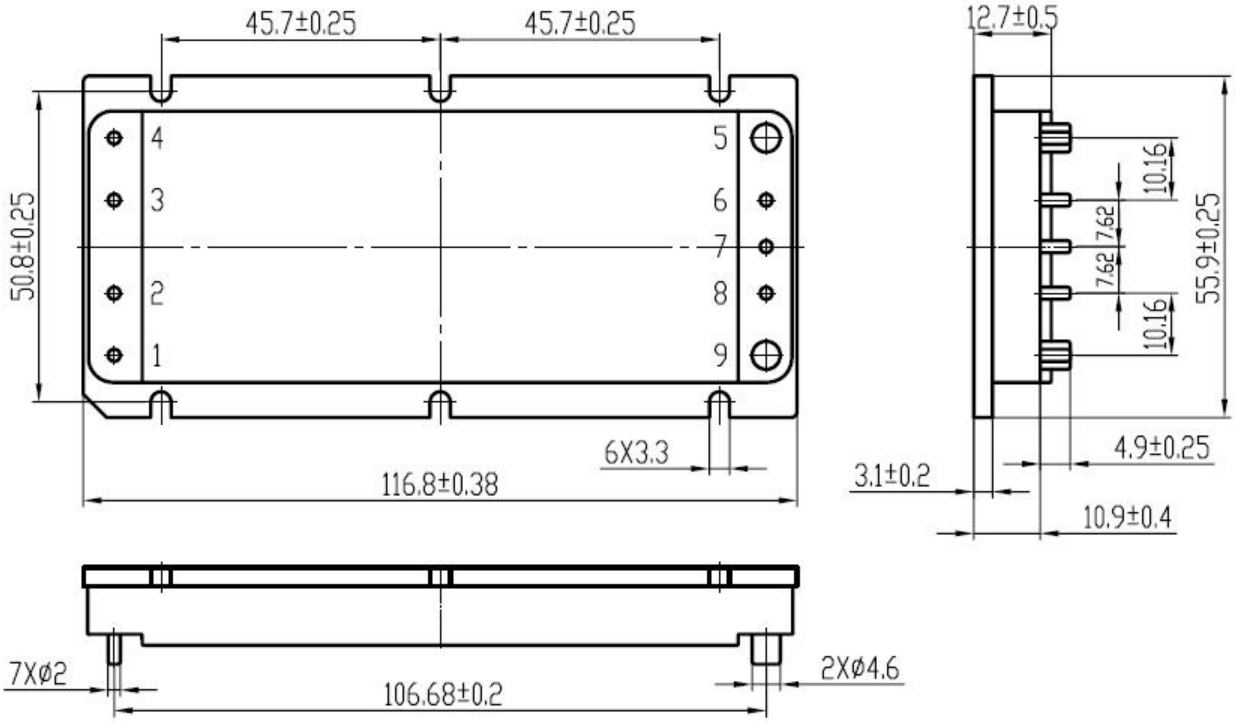
Output Characteristic

Parameter	Least Value	Typical Value	Crest Value	Uuit	Working conditions
Output current			10.42	A	
Output voltage	47.52	48.00	48.48	V	Tc=25℃, The full load
Winple and noise voltage		100	250	mV	Bandwidth Bw = 20 MHz,The full load
Voltage regulation		0.05	0.2	%	Vin：18V-24V, 24V-40V, The full load
Load Regulation		0.05	0.2	%	Carrying idler～The full load
Temperature coefficient			0.02	%/℃	Full load to no load
Capacity load capacity			1000	μF	The full load
Output voltage regulation capability	75		110	%	The full load
Output voltage protection point	53.7	55.7	57.7	V	Tc=25℃,carrying idler
Output current limiting protection point	10.6		14	A	
Short-circuit current			14	A	Tc=25℃, Vo＜250mV
Dynamics					50% -100% -50% load step Rate of change of the output current: 1A / μ S
Peak deviation		2	5	%	
Recovery time		275	500	μs	
Operating voltage of the PC end	5.50		6.00	V	Tc=25℃,Ipc=1.0mA, The full load
The PC terminal working current	2.5		4.5	mA	Tc=25℃,Vpc=5.5V, The full load
The PC terminal has a prohibited voltage	2.3		2.9	V	The full load
The PC terminal alarm voltage	0		0.5	V	Each protection function
PC terminal on output delay		25	40	ms	The full load
The PR output voltage amplitude	1.5		5.0	V	Tc=25℃, The full load
SC reference voltage	1.21	1.23	1.25	V	
Efficiency	87			%	Tc=25℃, The full load
Parallel current sharing accuracy			5	%	N x (30% full load to 100% full load)
Maximum number of parallel connections	6			A	

Isolation Characteristics

Parameter	Least value	Uuit	Working conditions
Insulation and pressure resistance			
Enter to output	3000	V_{AC}	60s,Tc=25℃,The leakage current is less than 3 mA
Input into the shell	1500	V_{AC}	60s, Tc=25℃,The leakage current is less than 1 mA
Output to shell	500	V_{AC}	60s, Tc=25℃,The leakage current is less than 1 mA
Insulation resistance			
Enter to output	200	MΩ	Tc=25℃,500V_{DC} test
Input into the shell	200	MΩ	Tc=25℃,500V_{DC} test
Output to shell	200	MΩ	Tc=25℃,500V_{DC} test

Structural Drawings



Pipe Foot Definition

Pin	Symbol	Function	Pin	Symbol	Function
1	+IN	Enter the positive end	5	-OUT	Output the negative end
2	PC	The original edge control end	6	-S	Negative induction compensation end
3	PR	Parallel end	7	SC	Side control end
4	-IN	Enter the negative end	8	+S	Positive induction compensation end
			9	+OUT	Output the positive end