

Product Characteristics

- ◆ Input voltage range: 180V-375V
- ◆ Output voltage range: 75% -110% Vout
- ◆ Efficiency ≥ 92%
- ◆ Over-voltage, over-current, short-circuit and over-temperature protection
- ◆ Interior patch design
- ◆ International standard pin mode
- ◆ Three years warranty period



Product Overview

This power module model is full brick series isolation module with an input range of 180V-375V, a maximum power of 600W, and an efficiency of ≥ 92%. It has input undervoltage and output overvoltageOutput overcurrent, output short circuit, and over temperature protection functions;

Application

The power supply uses an advanced control topology circuit, with advanced power Processing control and packaging technology, with high efficiency, 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	0.5~410	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	0.5~16.1	V

Product Naming

CFMV	300	A	12	X	600	B	-	
Changfeng MV series standard brick power supply	Input Voltage 300:180~375V	A:full brick B:1/2 brick C:1/4 brick	Output voltage 12:12V	M : Tc:-55~100℃ Ts:-65~125℃ H: Tc:-40~100℃ Ts:-55~125℃ T: Tc:-40~100℃ Ts:-40~100℃	output power 600:600W	B:Standard version		Default: non-domestic G: National production

## Input characteristic

Parameter	Least value	Typical value	Crest value	Unit	Working conditions
No-load state input power consumption		4	9	W	Tc=25℃
Disable the state input power consumption		2	4.5	W	Vpc≤2.3V
Input surge voltage			400	V	Tc=25℃, 100ms, the full load
Input underpressure	148	158	279	V	The full load
Input overpressure	378	400	420	V	Carrying idler

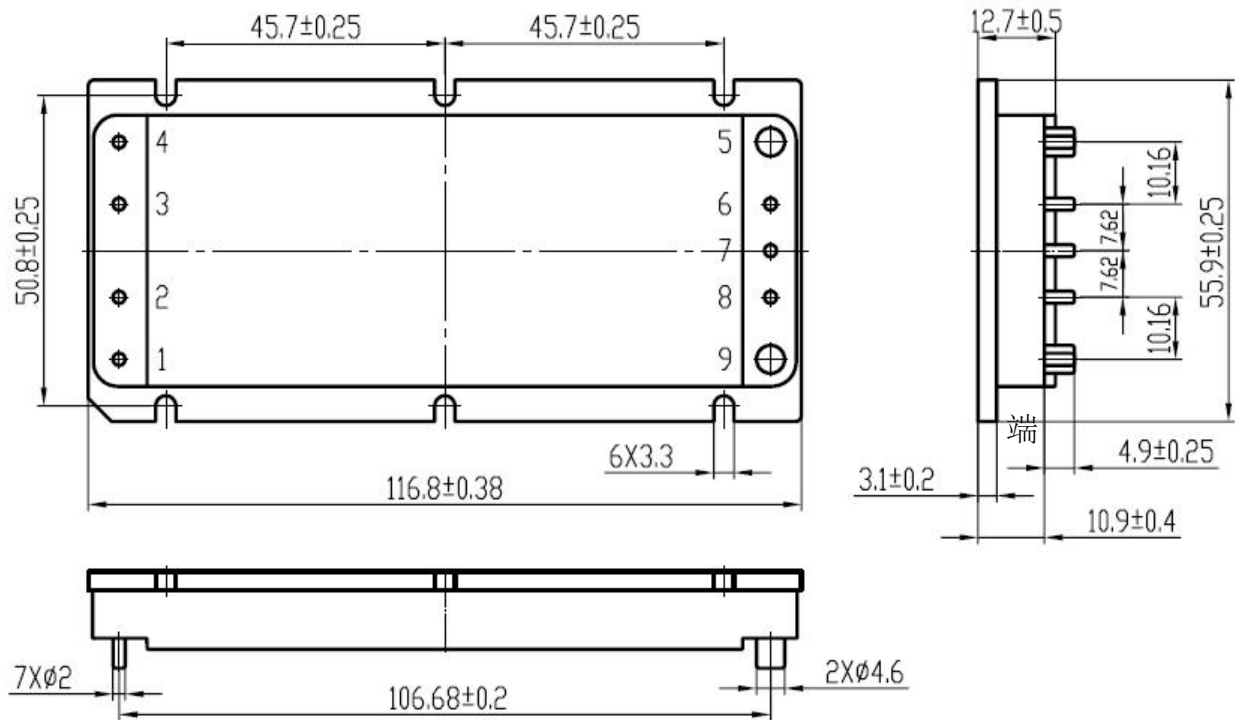
## Output characteristic

Parameter	Least value	Typical value	Crest value	Unit	Working conditions
Output current			50	A	
Output voltage	11.88	12.00	12.12	V	Tc=25℃, The full load
Winple and noise voltage		150	200	mV	Bandwidth Bw = 20 MHz, The full load
Voltage regulation		0.05	0.2	%	Vin: 180V-300V, 300V-375V, The full load
Load Regulation		0.05	0.2	%	Carrying idler~The full load
Temperature coefficient			0.02	%/℃	The full load
Output voltage regulation capability	75		110	%	The full load
Output voltage protection point	13.7		14.9	V	Tc=25℃, carrying idler
Output current limiting protection point	51		67.5	A	
Short-circuit current	39		67.5	A	Tc=25℃, Vo<250mV
Dynamics					
Peak deviation		2	5	%	50% -100% -50% load step Rate of change of the output current: 1A / μ S
Recovery time		100	200	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		5	7	ms	The full load
The PR output voltage amplitude	5.0		6.5	V	Tc=25℃, The full load
PR drive capability			6	A	Tc=25℃, No buffer amplification circuit
SC reference voltage	1.21	1.23	1.25	V	
SC alarm voltage			0.5	V	Each protection function
Efficiency	92			%	Tc=25℃, The full load

## Isolation Characteristics

Parameter	Least value	Unit	Working conditions
Insulation and pressure resistance			
Enter to output	3000	V <sub>AC</sub>	60s, T <sub>c</sub> =25℃, The leakage current is less than 3 mA
Input into the shell	1500	V <sub>AC</sub>	60s, T <sub>c</sub> =25℃, The leakage current is less than 1 mA
Output to shell	500	V <sub>AC</sub>	60s, T <sub>c</sub> =25℃, The leakage current is less than 1 mA
Insulation resistance			
Enter to output	200	MΩ	T <sub>c</sub> =25℃, 500V <sub>DC</sub> test
Input into the shell	200	MΩ	T <sub>c</sub> =25℃, 500V <sub>DC</sub> test
Output to shell	200	MΩ	T <sub>c</sub> =25℃, 500V <sub>DC</sub> test

## Structural Drawings



## Pipe Foot Definition

Pin	Symbol	Function	Pin	Symbol	Function
1	IN+	Input positive end	5	OUT-	Output negative terminal
2	PC	Prohibit and alarm end	6	-S	Negative induction compensation terminal
3	PR	Parallel end	7	SC	Output voltage adjustment terminal
4	IN-	Input negative terminal	8	+S	Positive induction compensation end
			9	OUT+	Output positive end