

### **Product Characteristics**

- Input voltage range: 18V-40V
- Output voltage range: 75%-110%Vout
- ◆ Efficiency≥88%
- 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 200W and an efficiency of 88%, 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 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	0.5~50	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	0.5~10.4	V

# **Product Naming**

CFMV	24	В	80	Χ	200	В	-	
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 08∶8V	M:To:-55~100°C Ts:-65~100°C H: To:-40~100°C Ts:-55~100°C T: To:-40~100°C Ts:-40~100°C	output power 200:200W	B:Standard version		Default: non-domestic G: National production



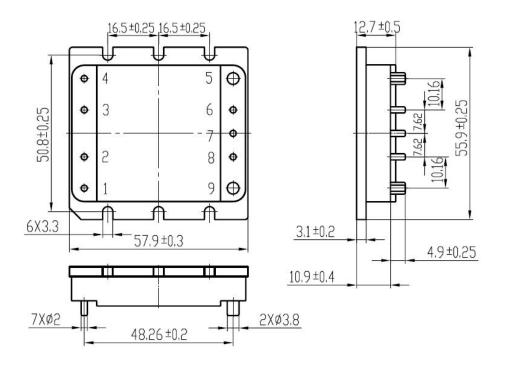
Input Characteristic					
Parameter	Least value	Typical value	Crest value	Uuit	Working conditions
No-load state input power consumption		1.5	3	W	Tc=25℃
Disable the state input power consumption		1	2	W	Vpc≤2.3V
Input surge voltage			50	V	Tc=25°C,100ms,the full load
Input underpressure	14.0	15.1	15.9	V	The full load
Input overpressure	40.5	42	43.5	V	Carrying idler

Output current         25         A           Output voltage         7.92         8         8.08         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: 18V-24V, 24V-40V, The full load           Load Regulation         0.05         0.2         %         Carrying idler~The full load           Capacity load capacity         5000         μF         The full load           Cuput voltage regulation capability         75         110         %         The full load           Output voltage protection point         9.36         9.7         10.1         V         Tc=25℃, carrying idler           Output vortent limiting protection point         25.5         33.8         A         Tc=25℃, Vo<250mV	Output Characteristic	;				
Output voltage         7.92         8         8.08         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: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         5000         µF         The full load           Output voltage         5500         9.7         10.1         %         The full load           Output voltage regulation capability         75         110         %         The full load           Output voltage rotection point         9.36         9.7         10.1         V         Tc=25℃, carrying idler           Output voltage protection point         25.5         33.8         A         Tc=25℃, vo<250mV	Parameter	Least Value	Typical Value	Crest Value	Uuit	Working conditions
Winple and noise voltage         150         200         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         %/°C         Full load to no load           Capacity load capacity         5000         μF         The full load           Output voltage regulation capability         75         110         %         The full load           Output voltage regulation capability         75         110         %         The full load           Output voltage protection point         9.36         9.7         10.1         V         Tc=25°C,carrying idler           Output voltage protection point         25.5         33.8         A         Tc=25°C,carrying idler           Output voltage protection point         25.5         33.8         A         Tc=25°C,carrying idler           Dynamics         Peak deviation         2         5         %         60°C,vo<250mV	Output current			25	Α	
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         5000         μF         The full load           Output voltage regulation capability         75         110         %         The full load           Output voltage protection point         9.36         9.7         10.1         V         Tc=25℃, carrying idler           Output voltage protection point         25.5         33.8         A         Tc=25℃, vo<250mV	Output voltage	7.92	8	8.08	V	Tc=25℃, 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 5000 μF The full load  Output voltage regulation capability 75 110 % The full load  Output voltage 9.36 9.7 10.1 V Tc=25℃, carrying idler  Output voltage protection point 9.36 9.7 10.1 V Tc=25℃, carrying idler  Output current limiting protection point 17.5 33.8 A  Short-circuit current 17.5 33.8 A  Feak deviation 2 5 % Rate of change of the output current: 1A / μ S  Operating voltage of the Output current: 1A / μ S  Operating voltage of the PC end 5.50 6.00 V Tc=25℃, Vpc=5.5V, The full load  The PC terminal working current 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 7 20 ms The full load  The PR drive capability 6 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	Winple and noise voltage		150	200	mV	Bandwidth Bw = 20 MHz,The full load
Temperature coefficient         0.02         %/℃         Full load to no load           Capacity load capacity         5000         μF         The full load           Output voltage regulation capability         75         110         %         The full load           Output voltage protection point         9.36         9.7         10.1         V         Tc=25℃, carrying idler           Output current limiting protection point         25.5         33.8         A         Tc=25℃, Vo<250mV	Voltage regulation		0.05	0.2	%	Vin: 18V-24V, 24V-40V, The full load
Capacity load capacity         5000         μF         The full load           Output voltage regulation capability         75         110         %         The full load           Output voltage protection point         9.36         9.7         10.1         V         Tc=25 ℃, carrying idler           Output current limiting protection point         25.5         33.8         A         Tc=25 ℃, Vo<250mV	Load Regulation		0.05	0.2	%	Carrying idler∼The full load
Output voltage regulation capability         75         110         %         The full load           Output voltage protection point         9.36         9.7         10.1         V         Tc=25°C, carrying idler           Protection point         25.5         33.8         A         Tc=25°C, Vo<250mV	Temperature coefficient			0.02	%/℃	Full load to no load
The Full load   Part	Capacity load capacity			5000	μF	The full load
protection point Output current limiting protection point 25.5 33.8 A  Short-circuit current 17.5 33.8 A  Short-circuit current 17.5 33.8 A  Tc=25°C, Vo<250mV  Dynamics  Peak deviation 2 5 % Rate of change of the output current: 1A / μ S  Operating voltage of the PC end 5.50 6.00 V Tc=25°C, Vpc=5.5V, The full load The PC terminal working current 2.5 4.5 mA Tc=25°C, Vpc=5.5V, The full load The PC terminal has a prohibited voltage 0 0.5 V Each protection function  PC terminal on output delay 7 20 ms The full load  The PR output voltage amplitude 1.5 5.0 V Tc=25°C, No buffer amplification circuit SC reference voltage 1.21 1.23 1.25 V  SC alarm voltage 0.5 V Each protection function		75		110	%	The full load
Short-circuit current   17.5   33.8   A   Tc=25℃, Vo<250mV	, ,	9.36	9.7	10.1	V	Tc=25℃,carrying idler
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       current: 1A / μ S         Operating voltage of the PC end of the PC end of the PC end of the PC terminal voltage       5.50       6.00       V       Tc=25 °C, lpc=1.0mA, 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       7       20       ms       The full load         The full load         The PC untput voltage amplitude       1.5       5.0       V       Tc=25 °C, No buffer amplification circuit         PR drive capability       6       A       Tc=25 °C, No buffer amplification circuit         SC reference voltage       1.21       1.23       1.25       V       Each protection function		25.5		33.8	Α	
Peak deviation  2 5 %  Recovery time  100 200 μs current: 1A / μ S  Operating voltage of the PC end 5.50 6.00 V Tc=25°C, Ipc=1.0mA, The full load  The PC terminal working current The PC terminal has a prohibited voltage a prohibited voltage The PC terminal alarm voltage The PC terminal on output delay The PC terminal on output delay The PC terminal on output voltage amplitude The PR output voltage The PR output voltage amplitude The PR output voltage The PR output vo	Short-circuit current	17.5		33.8	Α	Tc=25℃, Vo<250mV
Peak deviation       2       5       %       Rate of change of the output current: 1A / μ S         Recovery time       100       200       μs       current: 1A / μ S         Operating voltage of the PC end working current       5.50       6.00       V       Tc=25 °C, Ipc=1.0mA, The full load         The PC terminal working current       2.5       4.5       mA       Tc=25 °C, 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       7       20       ms       The full load         The PR output voltage amplitude       1.5       5.0       V       Tc=25 °C, No buffer amplification circuit         SC reference voltage       1.21       1.23       1.25       V         SC alarm voltage       0.5       V       Each protection function	Dynamics					
Recovery time 100 200 µs current: 1A / µ S  Operating voltage of the PC end 5.50 6.00 V Tc=25°C, Ipc=1.0mA, The full load  The PC terminal vorking current 2.5 4.5 mA Tc=25°C, Vpc=5.5V, The full load  The PC terminal has a prohibited voltage 0 0.5 V Each protection function  PC terminal on output delay 7 20 ms The full load  The PR output voltage amplitude 1.5 5.0 V Tc=25°C, No buffer amplification circuit SC reference voltage 1.21 1.23 1.25 V  SC alarm voltage 0.5 V Each protection function	Peak deviation		2	5	%	•
of the PC end 5.50 6.00 V 1c=25 C, pc=1.0mA, The full load The PC terminal working current 2.5 4.5 mA Tc=25 °C, 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 7 20 ms The full load The PR output voltage amplitude 1.5 5.0 V Tc=25 °C, The full load PR drive capability 6 A Tc=25 °C, No buffer amplification circuit SC reference voltage 1.21 1.23 1.25 V SC alarm voltage 0.5 V Each protection function	Recovery time		100	200	μs	
working current  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  7  20  ms  The full load  The PR output voltage amplitude  1.5  5.0  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 Each protection function		5.50		6.00	V	Tc=25℃,lpc=1.0mA, 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  7  20  ms  The full load  The PR output voltage amplitude 1.5  5.0  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 Each protection function	_	2.5		4.5	mA	Tc=25℃,Vpc=5.5V, The full load
The PC terminal alarm voltage 0 0.5 V Each protection function  PC terminal on output delay 7 20 ms The full load  The PR output voltage amplitude 1.5 5.0 V Tc=25°C, The full load  PR drive capability 6 A Tc=25°C, No buffer amplification circuit  SC reference voltage 1.21 1.23 1.25 V  SC alarm voltage 0.5 V Each protection function	The PC terminal has	2.3		2.9	V	The full load
The PR output voltage amplitude 1.5  5.0  V  Tc=25°C, The full load  PR drive capability  6  A  Tc=25°C, No buffer amplification circuit  SC reference voltage  1.21  1.23  1.25  V  SC alarm voltage  0.5  V  Each protection function	1	ge 0		0.5	V	Each protection function
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	PC terminal on output delay		7	20	ms	The full load
SC reference voltage 1.21 1.23 1.25 V  SC alarm voltage 0.5 V Each protection function	The PR output voltage ampli	tude 1.5		5.0	V	Tc=25℃, The full load
SC alarm voltage 0.5 V Each protection function	PR drive capability	6			Α	Tc=25℃,No buffer amplification circuit
	SC reference voltage	1.21	1.23	1.25	V	
Efficiency 87 % Tc=25℃, The full load	SC alarm voltage			0.5	V	Each protection function
	Efficiency	87			%	Tc=25℃, The full load



Isolation Character	istics		
Parameter	Least value	Uuit	Working conditions
Insulation and pressure	e resistance		
Enter to output	3000	Vac	60s,Tc=25℃,The leakage current is less than 3 mA
Input into the shell	1500	Vac	60s, Tc=25℃,The leakage current is less than 1 mA
Output to shell	500	Vac	60s, Tc=25℃,The leakage current is less than 1 mA
Insulation resistance			
Enter to output	200	ΜΩ	Tc=25°C,500Vpc test
Input into the shell	200	МΩ	Tc=25°C,500Vpc test
Output to shell	200	МΩ	Tc=25°C,500Vpc 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