

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
- ◆ Operating temperature range: -55°C to +100°C
- ◆ 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 250W 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 efficiency, high power density Degree, low noise and other advantages; with input overvoltage protection, output Overcurrent protection, over-temperature 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
Working Temperature	-55~100	℃
Storage Temperature	-65~125	℃

Product naming

CFMV	24	B	48	M	250	B	-	G
Changfeng MV series standard brick power supply	Input Voltage 24:18~40V	A:full brick B:1/2 brick C:1/4 brick	Out Voltage 48:48V	M : Tc :-55~100℃ Ts :-65~125℃ H: Tc :-40~100℃ Ts :-55~125℃ T: Tc :-40~100℃ Ts :-40~100℃	Output power 250:250W	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		4.5	10	W	T _c =25℃
Disable the state input power consumption		1.7	4.5	W	V _{pc} ≤2.3V
Input surge voltage			50	V	T _c =25℃, 100ms, the full load
Input underpressure	14.0	15.5	17.5	V	The full load
Input overpressure	40.5	42.2	43.5	V	The full load

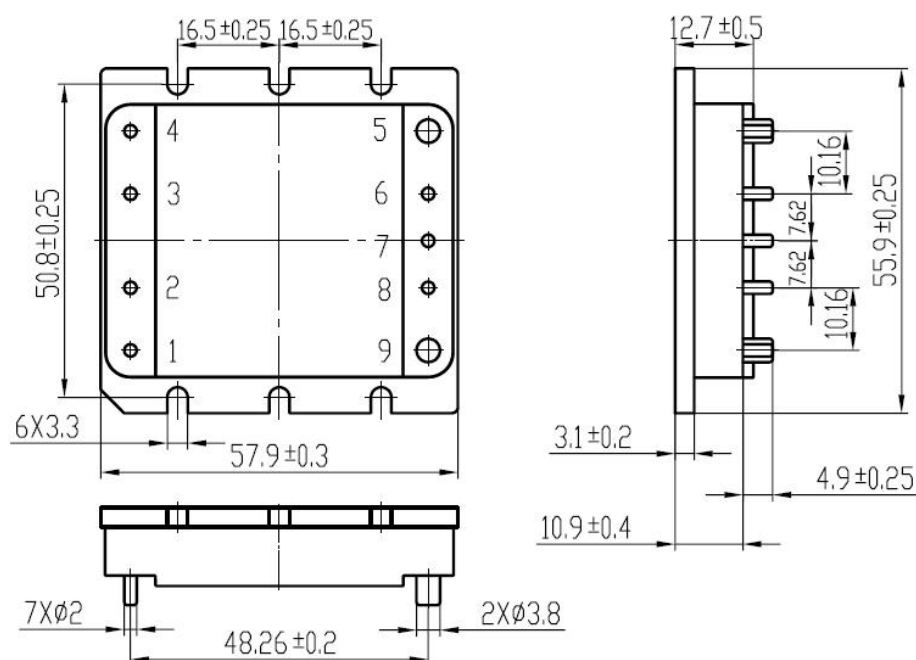
Output Characteristic

Parameter	Least Value	Typical Value	Crest Value	Unit	Working conditions
Output current			5.21	A	
Output voltage	47.52	48	48.48	V	T _c =25℃, The full load
Winple and noise voltage		200	400	mV	Bandwidth Bw = 20 MHz, The full load
Voltage regulation		0.05	0.2	%	V _{in} : 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	57.7	V	T _c =25℃, carrying idler
Output current limiting protection point	5.3		7.0	A	
Short-circuit current			7.0	A	T _c =25℃, V _o <250mV
Dynamics					
Peak deviation			5	%	50% -100% -50% load step Rate of change of the output current: 1A / μ S
Recovery time			500	μs	
Operating voltage of the PC end	5.50		6.00	V	T _c =25℃, I _{pc} =1.0mA, The full load
The PC terminal working current	2.5		4.5	mA	T _c =25℃, V _{pc} =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	40	ms	The full load
The PR output voltage amplitude	1.5		5.0	V	T _c =25℃, The full load
PR drive capability	6			A	T _c =25℃, No buffer amplification circuit
SC reference voltage	1.21	1.23	1.25	V	
Efficiency	87			%	T _c =25℃, The full load

Isolation Characteristics

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