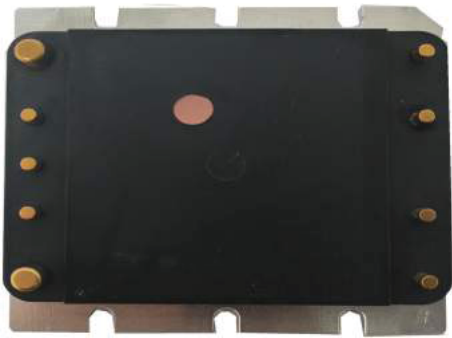


Product Characteristics

- ◆ Input voltage range: 18V-40V
- ◆ Output voltage range: 75% -110% Vout
- ◆ Efficiency ≥ 89%
- ◆ 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 250W and an efficiency of 89%, 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       | 0.5~4.7 | V    |

Product Naming

| CFMV                                            | 24                         | B                                          | 36                    | X                                                                                                      | 250                      | B                  | - |                                                 |
|-------------------------------------------------|----------------------------|--------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------|--------------------------|--------------------|---|-------------------------------------------------|
| Changfeng MV series standard brick power supply | Input Voltage<br>24:18~40V | A:full brick<br>B:1/2 brick<br>C:1/4 brick | Out Voltage<br>36:36V | M : Tc :-55~100℃<br>Ts :-65~125℃<br>H: Tc :-40~100℃<br>Ts :-55~125℃<br>T: Tc :-40~100℃<br>Ts :-40~100℃ | output power<br>250:250W | B:Standard version |   | Default: non-domestic<br>G: National production |

## Input Characteristic

| Parameter                                 | Least value | Typical value | Crest value | Unit | 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℃, 100ms, the full load |
| Input underpressure                       | 14.0        | 15.1          | 15.9        | V    | The full load                |
| Input overpressure                        | 40.5        | 42            | 43.5        | V    | The full load                |

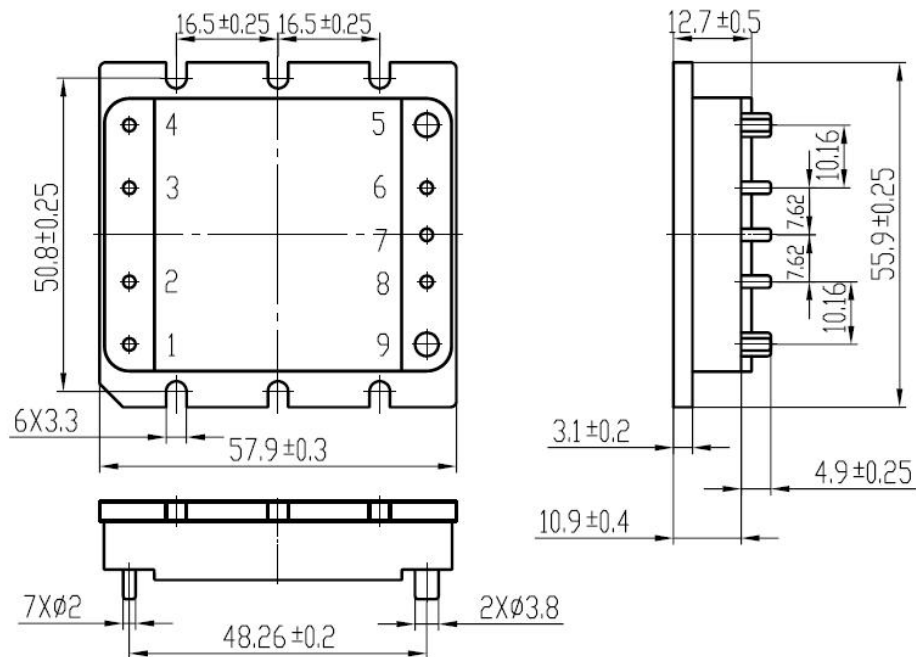
## Output Characteristic

| Parameter                                | Least value | Typical value | Crest value | Unit | Working conditions                                                         |
|------------------------------------------|-------------|---------------|-------------|------|----------------------------------------------------------------------------|
| Output current                           |             |               | 6.94        | A    |                                                                            |
| Output voltage                           | 35.64       | 36            | 36.36       | V    | Tc=25℃, The full load                                                      |
| Winple and noise voltage                 |             | 240           | 350         | 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                   |             |               | 2000        | μF   | The full load                                                              |
| Output voltage regulation capability     | 75          |               | 110         | %    | The full load                                                              |
| Output voltage protection point          | 40.4        | 41.8          | 43.4        | V    | Tc=25℃, carrying idler                                                     |
| Output current limiting protection point | 7.07        |               | 9.37        | A    |                                                                            |
| Short-circuit current                    | 4.85        |               | 9.37        | A    | Tc=25℃, Vo<250mV                                                           |
| Dynamics                                 |             |               |             |      |                                                                            |
| Peak deviation                           |             | 2             | 5           | %    | 50% -100% -50% load step<br>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              |             | 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    |                                                                            |
| SC alarm voltage                         |             |               | 0.5         | V    | Each protection function                                                   |
| Efficiency                               | 89          |               |             | %    | 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    | 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             |