

### FEATURES

1. Package Type: 2"X 1"
2. Operating temperature range: -40°C - +85°C
3. High efficiency up to 90%
4. Isolation voltage: 1500VDC
5. The mechanism has input undervoltage protection,
6. Output short circuit protection and over current protection
7. 4:1 Ultra-wide input voltage range
8. Fields of application: Power, industrial control, communications



3 years  
Warranty

### Selection Guide

| Part No.        | Input Voltage (VDC) |         | Output        |              | Full Load Efficiency% (Typ.) | Capacitive Load(μF) Max. |
|-----------------|---------------------|---------|---------------|--------------|------------------------------|--------------------------|
|                 | Nominal (Range)     | Maximum | Voltage (VDC) | Current (mA) |                              |                          |
| ZYB2403LD-20WR3 | 24<br>(9-36)        | 40      | 3.3           | 5000/0       | 86                           | 10000                    |
| ZYB2405LD-20WR3 |                     |         | 5             | 4000/0       | 88                           | 10000                    |
| ZYB2409LD-20WR3 |                     |         | 9             | 2222/0       | 89                           | 4700                     |
| ZYB2412LD-20WR3 |                     |         | 12            | 1667/0       | 89                           | 1600                     |
| ZYB2415LD-20WR3 |                     |         | 15            | 1333/0       | 90                           | 1000                     |
| ZYB2424LD-20WR3 |                     |         | 24            | 834/0        | 90                           | 500                      |
| ZYA2405LD-20WR3 |                     |         | ±5            | ±2000/0      | 86                           | #4800                    |
| ZYA2409LD-20WR3 |                     |         | ±9            | ±1111/0      | 88                           | #1000                    |
| ZYA2412LD-20WR3 |                     |         | ±12           | ±834/0       | 88                           | #800                     |
| ZYA2415LD-20WR3 |                     |         | ±15           | ±667/0       | 88                           | #625                     |
| ZYB4803LD-20WR3 | 48<br>(18-75)       | 80      | 3.3           | 5000/0       | 86                           | 10000                    |
| ZYB4805LD-20WR3 |                     |         | 5             | 4000/0       | 86                           | 10000                    |
| ZYB4809LD-20WR3 |                     |         | 9             | 2222/0       | 89                           | 4700                     |
| ZYB4812LD-20WR3 |                     |         | 12            | 1667/0       | 87                           | 1600                     |
| ZYB4815LD-20WR3 |                     |         | 15            | 1333/0       | 90                           | 1000                     |
| ZYB4824LD-20WR3 |                     |         | 24            | 834/0        | 88                           | 500                      |
| ZYA4805LD-20WR3 |                     |         | ±5            | ±2000/0      | 86                           | #4800                    |
| ZYA4812LD-20WR3 |                     |         | ±12           | ±834/0       | 88                           | #800                     |
| ZYA4815LD-20WR3 |                     |         | ±15           | ±667/0       | 89                           | #625                     |

## Input Specifications

| Item                             | Operating Conditions       |    | Min.                        | Typ.   | Max. | Unit |
|----------------------------------|----------------------------|----|-----------------------------|--------|------|------|
| Input Current(full load/no-load) | 24VDC nominal input series | -- | 779/40                      | 818/45 | --   | mA   |
|                                  |                            | -- | 969/40                      | 993/80 | --   |      |
|                                  |                            | -- | 947/6                       | 969/10 | --   |      |
|                                  | 48VDC nominal input series | -- | 400/20                      | 409/25 | --   |      |
|                                  |                            | -- | 485/20                      | 497/60 | --   |      |
|                                  |                            | -- | 474/5                       | 485/9  | --   |      |
| Reflected Ripple Current         | 24VDC nominal input series |    | --                          | 30     | --   |      |
|                                  | 48VDC nominal input series |    |                             |        |      |      |
| Impulse Voltage                  | 24VDC nominal input series |    | -0.7                        | --     | 50   | VDC  |
|                                  | 48VDC nominal input series |    | -0.7                        | --     | 100  |      |
| Starting Voltage                 | 24VDC nominal input series |    | --                          | --     | 9    |      |
|                                  | 48VDC nominal input series |    | --                          | --     | 18   |      |
| Undervoltage Protection          | 24VDC Input                |    | 5.5                         | 6.5    | --   |      |
|                                  | 48VDC Input                |    | 12                          | 15.5   | --   |      |
| Start time                       | nominal input voltage      |    | --                          | 10     | --   | ms   |
| Ctrl                             | turn off module            |    | connected GND or (0-1.2VDC) |        |      |      |
|                                  | turn on module             |    | No connected or (3.5-12VDC) |        |      |      |
|                                  | Input current when off     |    | --                          | 4      | 7    | mA   |
| Input Filter                     |                            |    | PI filter                   |        |      |      |
| Hot Plug                         |                            |    | Unavailable                 |        |      |      |

## Output Specifications

| Item                         | Operating Conditions                                                       |                    | Min. | Typ. | Max. | Unit  |
|------------------------------|----------------------------------------------------------------------------|--------------------|------|------|------|-------|
| Output Voltage Accuracy      | 0% - 100% Load                                                             |                    | --   | ±1   | ±3   | %     |
| Linear Regulation            | Full load,<br>Input voltage from<br>low limit to high limit                | Vo1                | --   | ±0.2 | ±0.5 |       |
|                              |                                                                            | V02                | --   | ±0.5 | ±1   |       |
| Load Regulation              | 5% - 100% Load                                                             | Vo1                | --   | ±0.5 | ±1   |       |
|                              |                                                                            | V02                | --   | ±0.5 | ±1.5 |       |
| Ripple & Noise               | 20MHZ Bandwidth                                                            |                    | --   | 60   | 85   | mVp-p |
| Cross Regulation             | Dual output, main road with 50% load,<br>secondary road with 10%-100% load |                    | --   | --   | ±5   | %     |
| Transient Recovery Time      | 25% load step<br>change                                                    |                    | --   | 300  | 500  | μs    |
| Transient Response Deviation |                                                                            | 3.3V、5V、±5V output | --   | ±5   | ±8   | %     |

|                          |                              |       |                           |     |       |      |
|--------------------------|------------------------------|-------|---------------------------|-----|-------|------|
|                          |                              | Other | --                        | ±3  | ±5    |      |
| Temperature Coefficient  |                              |       | --                        | --  | ±0.03 | %/°C |
| Trim                     | input voltage range(24V,48V) |       | --                        | ±10 | --    | %Vo  |
| Over Current Protection  | input voltage range          |       | 110                       | --  | 160   | %Io  |
| Over Voltage Protection  |                              |       | 110                       | --  | 190   | %Vo  |
| Short-circuit Protection |                              |       | Continuous, Self-Recovery |     |       |      |

## General Specifications

| Item                  | Operating Conditions                                               |                 | Min. | Typ. | Max. | Unit    |
|-----------------------|--------------------------------------------------------------------|-----------------|------|------|------|---------|
| Isolation Voltage     | Input-output, test time 1 minute,<br>leakage current less than 1mA |                 | 1500 | --   | --   | VDC     |
| Insulation Resistance | Input-output, insulated voltage 500VDC                             |                 | 1000 | --   | --   | MΩ      |
| Isolation Capacitance | Input-output, 100KHz/0.1V                                          | ZYB2424LD-20WR3 | --   | 2050 | --   | pF      |
|                       |                                                                    | other           | --   | 1050 | --   |         |
| Operating Temperature | See Fig 1                                                          |                 | -40  | --   | +85  | °C      |
| Storage Temperature   |                                                                    |                 | -55  | --   | +125 |         |
| Storage Humidity      | Non-condensing                                                     |                 | 5    | --   | 95   | %RH     |
| Soldering Profile     | 1.5mm from case for 10 sec                                         |                 | --   | --   | 300  | °C      |
| Switching Frequency   | Full load, nominal input voltage                                   |                 | --   | 270  | --   | kHz     |
| MTBF                  | MIL-HDBK-217F@25°C                                                 |                 | 1000 | --   | --   | K Hours |

## Mechanical Specifications

|                    |                          |
|--------------------|--------------------------|
| Case Material      | Aluminum alloy           |
| Package Dimensions | 50.80 * 25.40 * 11.80 mm |
| Weight             | 28.00g(Typ.)             |
| Cooling Method     | Free air convection      |

## EMC Specifications

|     |     |                                                                       |
|-----|-----|-----------------------------------------------------------------------|
| EMI | CE  | CISPR32/EN55032 CLASS A(open board)/CLASS B (application circuit 3-②) |
|     | RE  | CISPR32/EN55032 CLASS A(open board)/CLASS B (application circuit 3-②) |
| EMS | ESD | IEC/EN61000-4-2 Contact±4KV perf. CriteriaB                           |
|     | RS  | IEC/EN61000-4-3 10V/m perf. CriteriaA                                 |
|     | EFT | IEC/EN61000-4-4 ±2KV(application circuit3-①) Perf.Criteria B          |

|  |                                                     |                                                          |                  |
|--|-----------------------------------------------------|----------------------------------------------------------|------------------|
|  | Surge                                               | IEC/EN61000-4-5 line to line±2KV(application circuit3-①) | Perf.Criteria B  |
|  | CS                                                  | IEC/EN61000-4-6 3 Vr.m.s                                 | Perf.Criteria A  |
|  | Voltage dips, drops and short interruption immunity | IEC/EN61000-4-29 0%, 70%                                 | perf. Criteria B |

## Typical Characteristic Curves

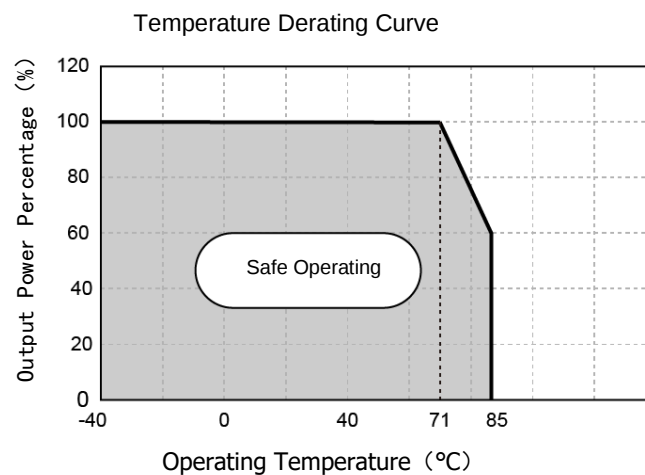
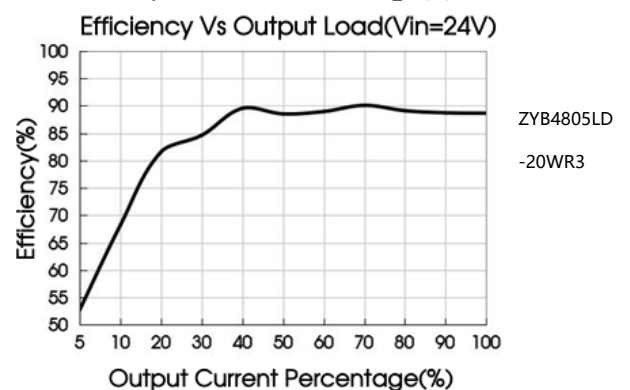
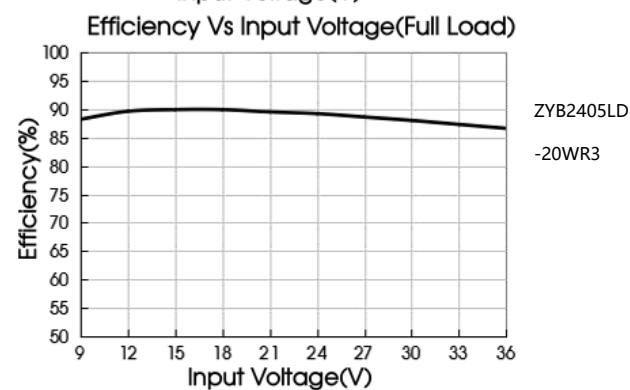
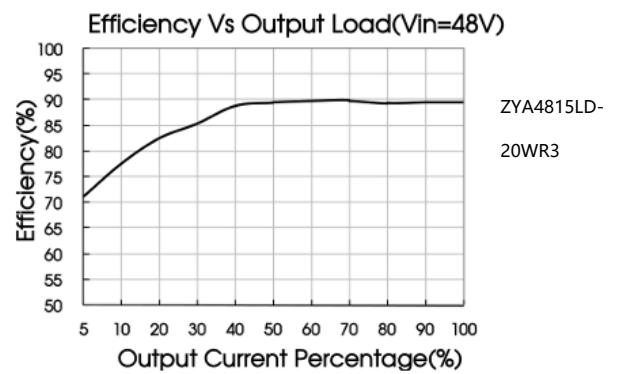
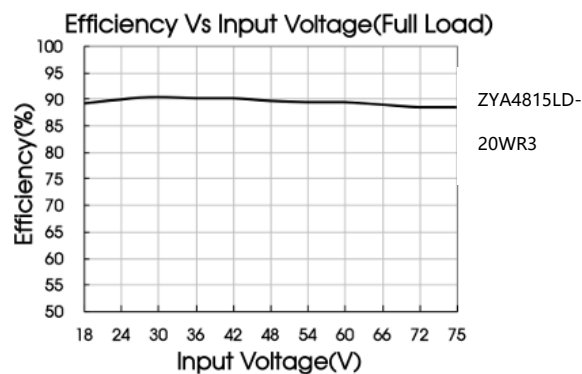
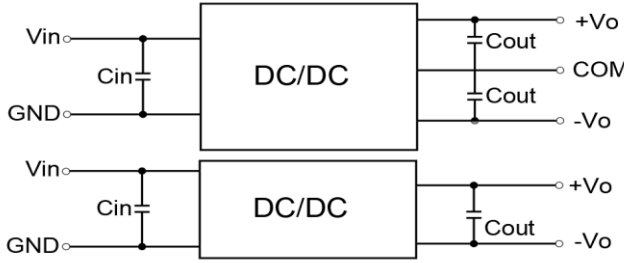
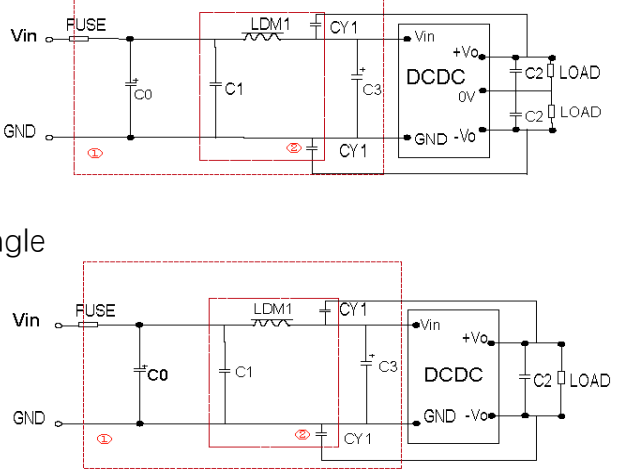
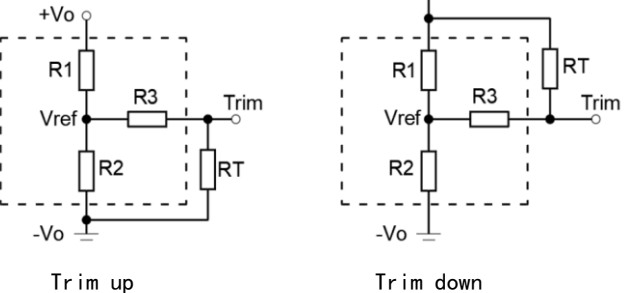


Fig 1

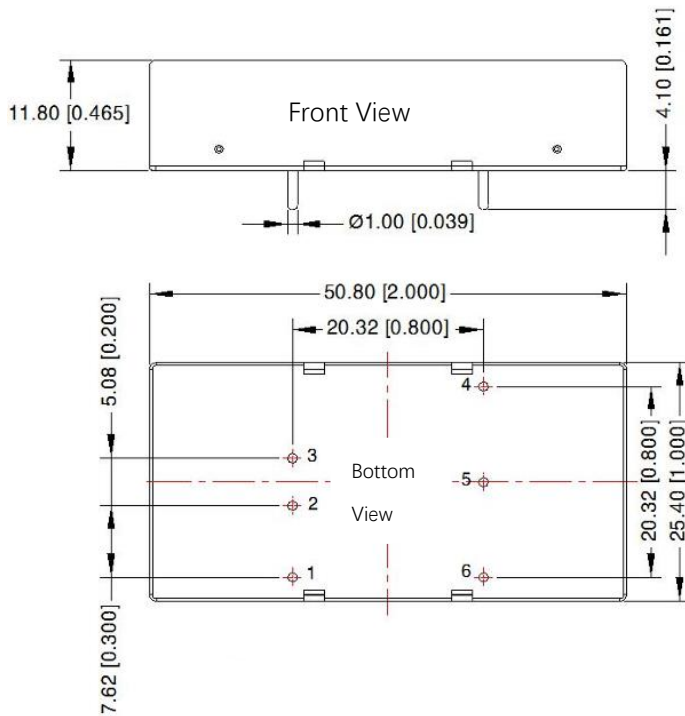


### Typical Circuit Design And Application

|  <p>Fig 2</p>                                                                                                     | <table><tr><th colspan="6">Recommended component parameters</th></tr><tr><th>Single Vout (VDC)</th><th>Cout (μF)</th><th>Cin (uF)</th><th>dual Vout (VDC)</th><th>Cout (μF)</th><th>Cin (uF)</th></tr><tr><td>3.3/5</td><td>470</td><td rowspan="3">100</td><td>±5</td><td>220</td><td rowspan="3">100</td></tr><tr><td>9/12/15</td><td>220</td><td>±9/±12/±15</td><td>100</td></tr><tr><td>24</td><td>100</td><td>--</td><td>--</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Recommended component parameters     |                 |           |          |            |            | Single Vout (VDC) | Cout (μF)                                                    | Cin (uF) | dual Vout (VDC) | Cout (μF) | Cin (uF)   | 3.3/5 | 470     | 100      | ±5 | 220                                     | 100  | 9/12/15 | 220 | ±9/±12/±15 | 100     | 24      | 100 | --  | -- |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------|-----------|----------|------------|------------|-------------------|--------------------------------------------------------------|----------|-----------------|-----------|------------|-------|---------|----------|----|-----------------------------------------|------|---------|-----|------------|---------|---------|-----|-----|----|--------|------|----|-----|----|--------|------|----|-----|----|--------|------|------|-----|
| Recommended component parameters                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                      |                 |           |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| Single Vout (VDC)                                                                                                                                                                                  | Cout (μF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Cin (uF)                             | dual Vout (VDC) | Cout (μF) | Cin (uF) |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| 3.3/5                                                                                                                                                                                              | 470                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 100                                  | ±5              | 220       | 100      |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| 9/12/15                                                                                                                                                                                            | 220                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      | ±9/±12/±15      | 100       |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| 24                                                                                                                                                                                                 | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      | --              | --        |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| <p>dual</p>  <p>single</p> <p>Fig 3</p>                                                                          | <table><tr><th colspan="3">EMI recommended component parameters</th></tr><tr><th>Model</th><th>Vin: 24VDC</th><th>Vin: 48VDC</th></tr><tr><td>FUSE</td><td colspan="2">Select according to the actual input current of the customer</td></tr><tr><td>C0、C3</td><td>330μF/50V</td><td>330μF/100V</td></tr><tr><td>C1</td><td>1μF/50V</td><td>1μF/100V</td></tr><tr><td>C2</td><td colspan="2">Refer to the Cout parameter in Figure 2</td></tr><tr><td>LCM</td><td colspan="2">1mH</td></tr><tr><td>CY1、CY2</td><td colspan="2">1nF/2KV</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                   | EMI recommended component parameters |                 |           | Model    | Vin: 24VDC | Vin: 48VDC | FUSE              | Select according to the actual input current of the customer |          | C0、C3           | 330μF/50V | 330μF/100V | C1    | 1μF/50V | 1μF/100V | C2 | Refer to the Cout parameter in Figure 2 |      | LCM     | 1mH |            | CY1、CY2 | 1nF/2KV |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| EMI recommended component parameters                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                      |                 |           |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| Model                                                                                                                                                                                              | Vin: 24VDC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Vin: 48VDC                           |                 |           |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| FUSE                                                                                                                                                                                               | Select according to the actual input current of the customer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                      |                 |           |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| C0、C3                                                                                                                                                                                              | 330μF/50V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 330μF/100V                           |                 |           |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| C1                                                                                                                                                                                                 | 1μF/50V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1μF/100V                             |                 |           |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| C2                                                                                                                                                                                                 | Refer to the Cout parameter in Figure 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                      |                 |           |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| LCM                                                                                                                                                                                                | 1mH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      |                 |           |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| CY1、CY2                                                                                                                                                                                            | 1nF/2KV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                      |                 |           |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
|  <p>Trim up</p> <p>Trim down</p> <p>Trim resistor connections (dashed line shows internal resistor network)</p> | <table><tr><th colspan="5">Trim</th></tr><tr><th>Vout</th><th>R1(KΩ)</th><th>R2(KΩ)</th><th>R3(KΩ)</th><th>Vref(V)</th></tr><tr><td>3.3</td><td>4.801</td><td>2.87</td><td>12.4</td><td>1.24</td></tr><tr><td>5</td><td>2.883</td><td>2.87</td><td>10</td><td>2.5</td></tr><tr><td>9</td><td>7.500</td><td>2.87</td><td>15</td><td>2.5</td></tr><tr><td>12</td><td>11.000</td><td>2.87</td><td>15</td><td>2.5</td></tr><tr><td>15</td><td>14.949</td><td>2.87</td><td>15</td><td>2.5</td></tr><tr><td>24</td><td>24.872</td><td>2.87</td><td>17.8</td><td>2.5</td></tr></table> <div><math display="block">\text{up: } R_T = \frac{aR_2}{R_2 - a} - R_3</math><math display="block">\text{down: } R_T = \frac{aR_1}{R_1 - a} - R_3</math><math display="block">a = \frac{V_{ref}}{V_o' - V_{ref}} \cdot R_1</math><math display="block">a = \frac{V_o' - V_{ref}}{V_{ref}} \cdot R_2</math><p><math>R_T</math> = Trim Resistor value<br/><math>a</math> = self-defined parameter</p></div> | Trim                                 |                 |           |          |            | Vout       | R1(KΩ)            | R2(KΩ)                                                       | R3(KΩ)   | Vref(V)         | 3.3       | 4.801      | 2.87  | 12.4    | 1.24     | 5  | 2.883                                   | 2.87 | 10      | 2.5 | 9          | 7.500   | 2.87    | 15  | 2.5 | 12 | 11.000 | 2.87 | 15 | 2.5 | 15 | 14.949 | 2.87 | 15 | 2.5 | 24 | 24.872 | 2.87 | 17.8 | 2.5 |
| Trim                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                      |                 |           |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| Vout                                                                                                                                                                                               | R1(KΩ)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | R2(KΩ)                               | R3(KΩ)          | Vref(V)   |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| 3.3                                                                                                                                                                                                | 4.801                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2.87                                 | 12.4            | 1.24      |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| 5                                                                                                                                                                                                  | 2.883                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2.87                                 | 10              | 2.5       |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| 9                                                                                                                                                                                                  | 7.500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2.87                                 | 15              | 2.5       |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| 12                                                                                                                                                                                                 | 11.000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2.87                                 | 15              | 2.5       |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| 15                                                                                                                                                                                                 | 14.949                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2.87                                 | 15              | 2.5       |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |
| 24                                                                                                                                                                                                 | 24.872                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2.87                                 | 17.8            | 2.5       |          |            |            |                   |                                                              |          |                 |           |            |       |         |          |    |                                         |      |         |     |            |         |         |     |     |    |        |      |    |     |    |        |      |    |     |    |        |      |      |     |

All DC-DC converters of this series are tested before delivery using the recommended circuit shown in Fig. 2. Input and/or output ripple can be further reduced by appropriately increasing the input & output capacitor values  $C_{in}$  and  $C_{out}$  and/or by selecting capacitors with a low ESR (equivalent series resistance). Also make sure that the capacitance is not exceeding the specified max. capacitive load value of the product.

## Dimensions and Recommended Layout

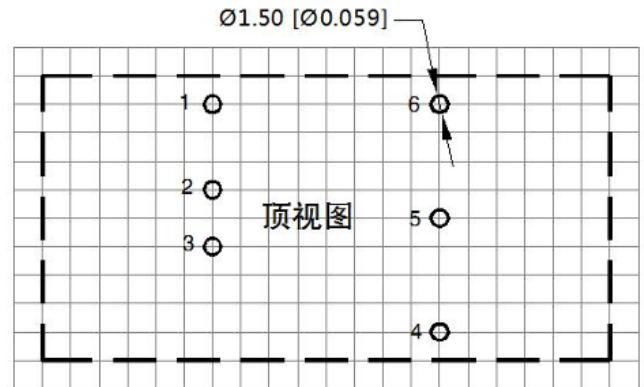


Note:

Unit: mm[inch]

Pin section tolerances:  $\pm 0.10$  [ $\pm 0.004$ ]

General tolerances:  $\pm 0.50$  [ $\pm 0.020$ ]



Note: The grid distance is 2.54\*2.54mm

| Pin | Function<br>(Single) | Function<br>(double) |
|-----|----------------------|----------------------|
| 1   | Ctrl                 | Ctrl                 |
| 2   | GND                  | GND                  |
| 3   | Vin                  | Vin                  |
| 4   | +Vo                  | +Vo                  |
| 5   | Trim                 | 0V                   |
| 6   | 0V                   | -Vo                  |

Note:

1. If the product works under the minimum required load, it cannot guarantee that the performance of the product complies with all the performance indicators in this manual;
2. The maximum capacitive load is tested under the input voltage range and full load condition;
3. Unless otherwise stated, all indexes in this manual are measured at  $T_a=25^\circ\text{C}$ , humidity  $<75\%\text{RH}$ , nominal input voltage and rated output load;
4. All index testing methods in this manual are based on the enterprise standards of the company;
5. Our company can provide product customization, specific needs can directly contact our technical staff;