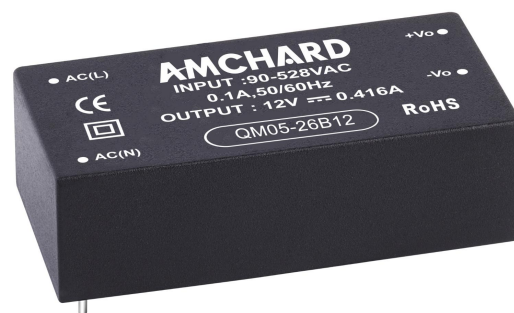


## Product Feature

1. Wide input range (90-528VAC, 100-745VDC)
2. 51.0\*25.5\*15.5mm compact size
3. No load power consumption<0.1W
4. Protection type: short circuit/over load/over voltage
5. Operating temperature range: -40°C to +85°C
6. 4000V isolation voltage
7. 100% high temperature burn-in and function test



3 years  
Warranty

## Selection Guide

| Part No.   | Input Voltage (VAC)     | Out Power (W) | Out Voltage (VDC) | Out Current (mA)MAX | Full Load Efficiency % | CapLoad (µF) Max. |
|------------|-------------------------|---------------|-------------------|---------------------|------------------------|-------------------|
| QM05-26B03 | 90-528VAC<br>100-745VDC | 3.3           | 3.3               | 1000                | 74                     | 10000             |
| QM05-26B05 |                         | 5             | 5                 | 1000                | 72                     | 10000             |
| QM05-26B09 |                         | 5             | 9                 | 555                 | 74                     | 5000              |
| QM05-26B12 |                         | 5             | 12                | 416                 | 74                     | 3000              |
| QM05-26B15 |                         | 5             | 15                | 333                 | 74                     | 2000              |
| QM05-26B24 |                         | 5             | 24                | 208                 | 78                     | 1000              |

## Specifications

| Items  |                         |                                  |
|--------|-------------------------|----------------------------------|
| OUTPUT | Voltage Tolerance       | ±2.0%                            |
|        | Line Regulation         | ±1.0%                            |
|        | Load Regulation         | ±1.0%                            |
|        | Setup, Rise Time (Typ.) | 1500ms, 50ms/380VAC at full load |

|             |                                 |                                                                      |          |        |        |               |
|-------------|---------------------------------|----------------------------------------------------------------------|----------|--------|--------|---------------|
|             | Hold Up Time (Typ.)             | 30ms/380VAC at full load                                             |          |        |        |               |
|             | Ripple & Noise (Max.) (Note 2.) | 100mV                                                                |          |        |        |               |
| INPUT       | Voltage Range                   | 90-528VAC 100-745VDC                                                 |          |        |        |               |
|             | Frequency Range                 | 47-440Hz                                                             |          |        |        |               |
|             | Current (Typ.)                  | 450mA/380VAC                                                         |          |        |        |               |
|             | Inrush Current (Typ.)           | Cold boot 30A/380VAC                                                 |          |        |        |               |
|             | Leakage Current (Typ.)          | <0.1mA/380VAC/50Hz                                                   |          |        |        |               |
|             |                                 |                                                                      |          |        |        |               |
| PROTECTION  | Over Load                       | ≥110% load, recovers automatically after fault condition is removed  |          |        |        |               |
|             | Short Circuit                   | Hiccup mode, recovers automatically after fault condition is removed |          |        |        |               |
|             | Over Voltage (Note 4.)          | Output voltage offor clamp                                           |          |        |        |               |
|             |                                 | Voltage                                                              | 3.3/5VDC | 9VDC   | 12VDC  | 15VDC 24VDC   |
|             |                                 | Range                                                                | ≤7.5VDC  | ≤15VDC | ≤16VDC | ≤20VDC ≤30VDC |
| ENVIRONMENT | Working Temp.                   | -40°C to +85°C (Refer to "Derating curve")                           |          |        |        |               |
|             | Working Humidity                | 85%RH max                                                            |          |        |        |               |
|             | MTBF                            | 300K hrs min. MIL-HDBK-217F (25°C)                                   |          |        |        |               |
|             | Storage Temp., Humidity         | -40°C to +85°C, 10-95%RH                                             |          |        |        |               |
|             | Temp. Coefficient               | 0.03%/ (0-50°C)                                                      |          |        |        |               |
|             | Vibration                       | 10-500Hz, 2G, 10min./1cycle, 60min.each along X, Y, Z axes           |          |        |        |               |

## EMC Specifications

|            |       |                                    |  |  |  |                  |
|------------|-------|------------------------------------|--|--|--|------------------|
| <b>EMI</b> | CE    | CISPR32/EN55032 CLASS B            |  |  |  |                  |
|            | RE    | CISPR32/EN55032 CLASS B            |  |  |  |                  |
| <b>EMS</b> | RS    | IEC/EN61000-4-3 10V/m              |  |  |  | perf. Criteria A |
|            | EFT   | IEC/EN61000-4-4 ±4KV               |  |  |  | perf. Criteria B |
|            | Surge | IEC/EN61000-4-5 line to line ±2KV  |  |  |  | perf. Criteria B |
|            | CS    | IEC/EN61000-4-6 10Vr.m.s           |  |  |  | perf. Criteria A |
|            | ESD   | IEC/EN61000-4-2 Contact ±8KV/±15KV |  |  |  | perf. Criteria B |

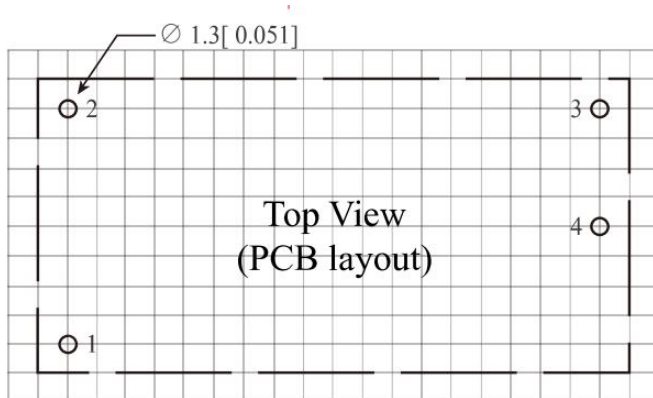
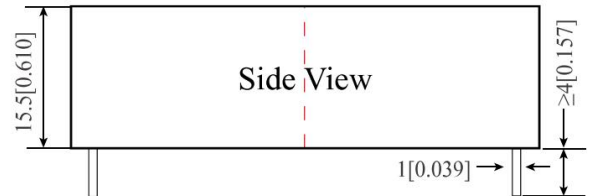
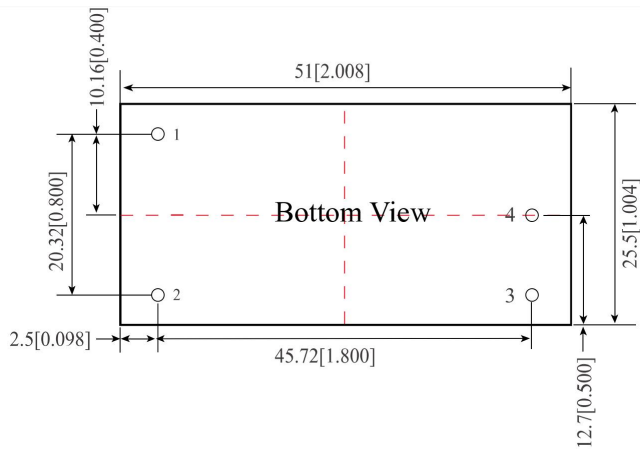
## Mechanical Specification

|                           |                           |
|---------------------------|---------------------------|
| <b>Package Dimensions</b> | 51 x 25.5 x 15.5mm        |
| <b>Weight</b>             | 30g (Typ.) 19.45kg/Carton |
| <b>Package</b>            | 580PCS/Carton             |
| <b>Carton Size</b>        | 360*300*250mm             |

## EMC Specifications

|            |       |                                                           |                  |
|------------|-------|-----------------------------------------------------------|------------------|
| <b>EMI</b> | CE    | CISPR32/EN55032 CLASS B                                   |                  |
|            | RE    | CISPR32/EN55032 CLASS B                                   |                  |
| <b>EMS</b> | RS    | IEC/EN61000-4-3 10V/m                                     | perf. Criteria A |
|            | EFT   | IEC/EN61000-4-4 ±4KV                                      | perf. Criteria B |
|            | Surge | IEC/EN61000-4-5 line to line ±1KV                         | perf. Criteria B |
|            |       | IEC/EN61000-4-5 line to line ±2KV (application circuit 2) | perf. Criteria B |
|            | CS    | IEC/EN61000-4-6 10Vr.m.s                                  | perf. Criteria A |
|            | ESD   | IEC/EN61000-4-2 Contact ±6KV/±8KV                         | perf. Criteria B |

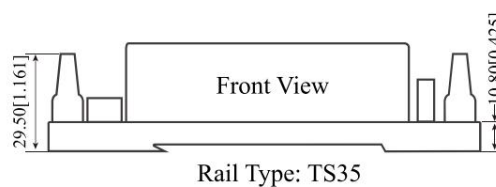
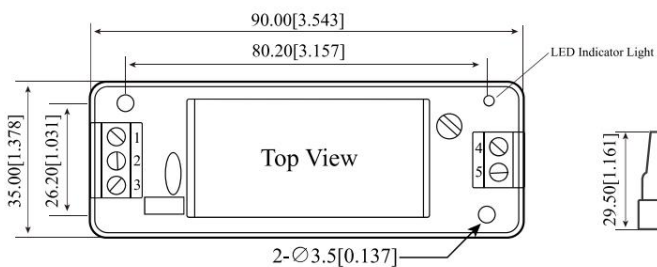
### Dimension and Function



| Pin | Function |
|-----|----------|
| 1   | AC(N)    |
| 2   | AC(L)    |
| 3   | +Vo      |
| 4   | -Vo      |

Note: Grid Spacing 2.54 \* 2.54mm

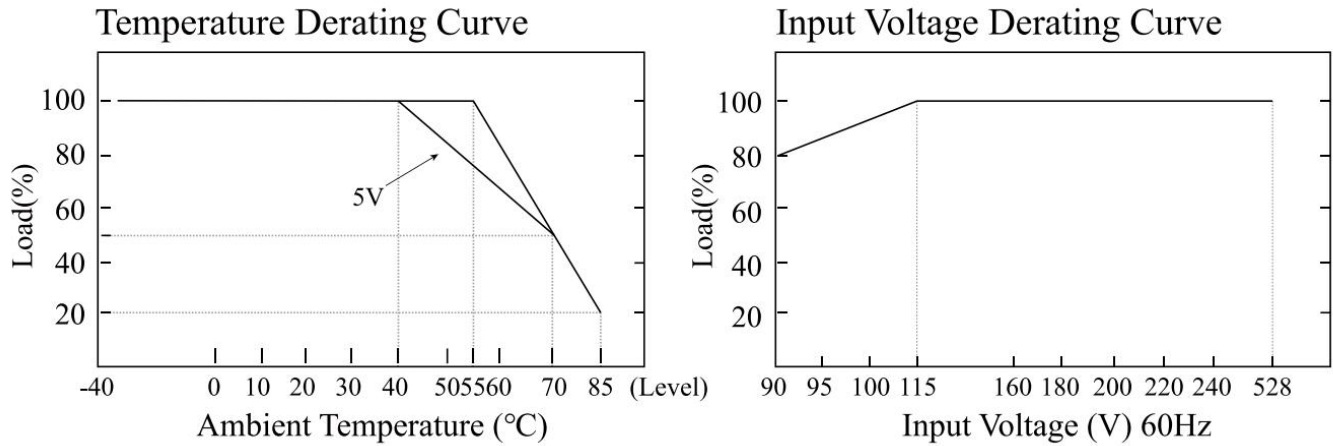
### PCB mounting style/Rail-type package style



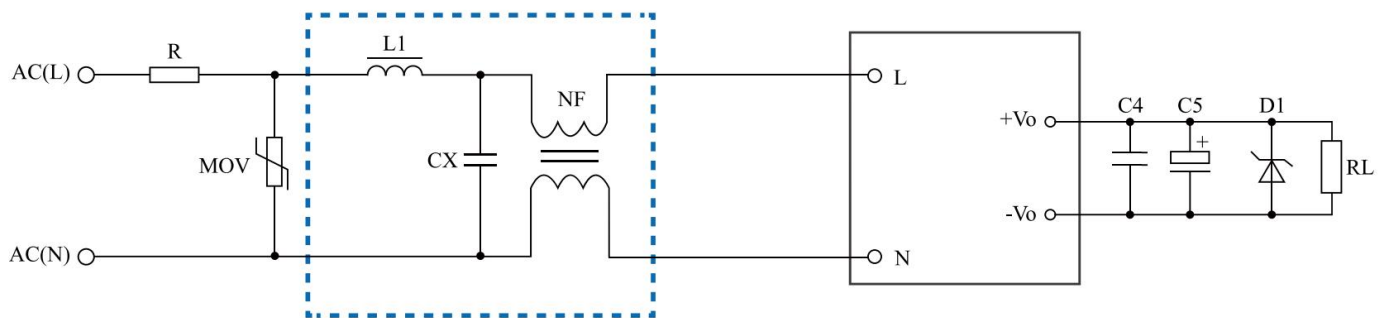
| Pin | Function |
|-----|----------|
| 1   | AC(N)    |
| 2   | No Pin   |
| 3   | AC(L)    |
| 4   | +Vo      |
| 5   | -Vo      |

NOTE: Unit size: mm[inch] Terminal tolerance:  $\pm 0.1\text{mm}$  Unmarked tolerances:  $\pm 0.5\text{mm}$

### Derating Curve



### Type Application



#### NOTE:

- Output filter capacitor C5 is electrolytic capacitor. It is recommended to use high-frequency low-resistance electrolytic capacitor. Refer to technical specifications provided by manufacturers for capacity and current. C4 is to remove high frequency noise.
- The dotted box in the figure shows the EMC filter connected to meet the higher EMC requirements. It can be omitted in general applications.

Our company has formed a filter with L1, CX and NF in the dashed box for customers to use. The model is FP01.

**List Of Components**

| ITEM       | MOV                  | R                  | NF                       | L1           | CX            | C4       | C5        | D1       |
|------------|----------------------|--------------------|--------------------------|--------------|---------------|----------|-----------|----------|
| QM05-26B03 | Varistors<br>14D821K | Safety R<br>10Ω/1W | Common mode<br>30mH/0.5A | 1mH/<br>0.5A | 104K/60<br>0V | 104K/50V | 470uF/16V | P6KE7.5A |
| QM05-26B05 |                      |                    |                          |              |               |          | 470uF/16V | P6KE7.5A |
| QM05-26B09 |                      |                    |                          |              |               |          | 150uF/16V | P6KE15A  |
| QM05-26B12 |                      |                    |                          |              |               |          | 120uF/16V | P6KE16A  |
| QM05-26B15 |                      |                    |                          |              |               |          | 120uF/25V | P6KE20A  |
| QM05-26B24 |                      |                    |                          |              |               |          | 100uF/35V | P6KE30A  |

**Note:**

1. The input voltage cannot exceed the specified range value, otherwise permanent and irreparable damage may be caused;
2. Unless otherwise specified, the parameters in this datasheet were measured at 25°C, humidity 40%~75%, input nominal voltage and output pure resistance mode under full load;
3. All index test methods are based on our company's enterprise standards.

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