

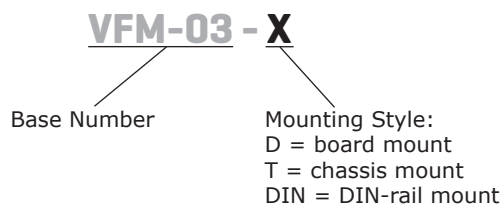
SERIES: VFM-03 | DESCRIPTION: DC POWER LINE FILTER
FEATURES

- 3 A maximum filter
- frequency attenuation to 20 dB
- available in DIP, Chassis and DIN rail mounting options
- optimized for reducing EMI noise on DC power line


SPECIFICATIONS

| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-------|-------|
| input voltage | | 0 | | 80 | Vdc |
| input current | | | | 3 | A |
| noise attenuation | at 150 kHz ~ 1 GHz | | 20 | | dB |
| isolation voltage | | | | 1,500 | Vdc |
| RoHS | yes | | | | |
| operating temperature | | -40 | | 85 | °C |
| storage temperature | | -55 | | 125 | °C |
| storage humidity | non-condensing | 5 | | 95 | % |
| case temperature rise | at nominal current | | | 40 | °C |

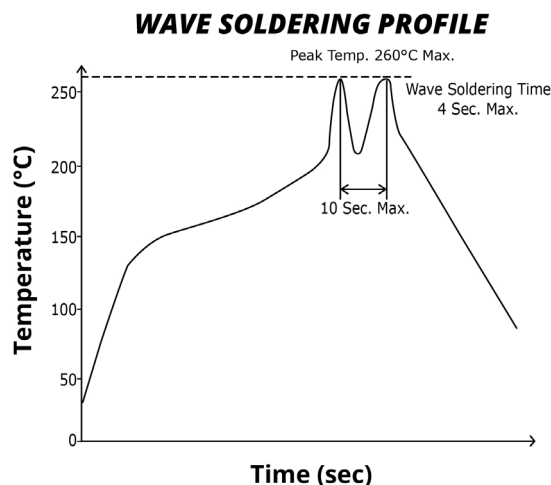
Notes: 1. All specifications are measured at T_a=25°C, humidity < 75%, unless otherwise specified.

PART NUMBER KEY


SOLDERABILITY²

| parameter | conditions/description | min | typ | max | units |
|----------------|----------------------------|-----|-----|-----|-------|
| hand soldering | for 3~5 seconds | 350 | 360 | 370 | °C |
| wave soldering | see wave soldering profile | | | 260 | °C |

Note: 2. For board mount models only.



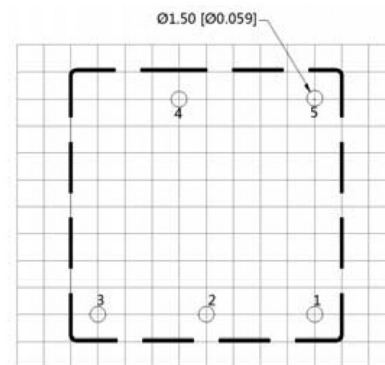
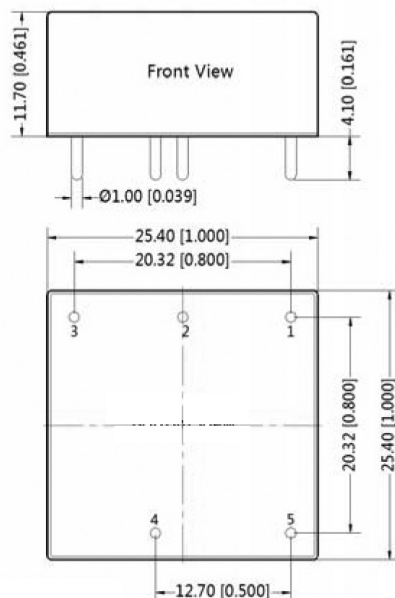
MECHANICAL

| parameter | conditions/description | min | typ | max | units |
|---------------|--|-----|----------------|-----|-------|
| dimensions | board mount: 25.40 x 25.40 x 11.70 [1.000 x 1.000 x 0.461 inch] chassis mount: 76.00 x 31.50 x 21.20 [2.992 x 1.240 x 0.835 inch] DIN-Rail mount: 76.00 x 31.50 x 25.80 [2.992 x 1.240 x 1.016 inch] | | | | mm |
| case material | aluminum alloy | | | | |
| weight | board mount chassis mount DIN-rail mount | | 15 35 55 | | g |

MECHANICAL DRAWING (BOARD MOUNT)

units: mm [inch]
tolerance: ±0.50[±0.020]
pin diameter tolerance: ±0.10[±0.004]
pin height tolerance: ±0.50[±0.020]

| PIN CONNECTIONS | |
|-----------------|----------|
| PIN | Function |
| 1 | +Vin |
| 2 | -Vin |
| 3 | GND |
| 4 | -Vout |
| 5 | +Vout |



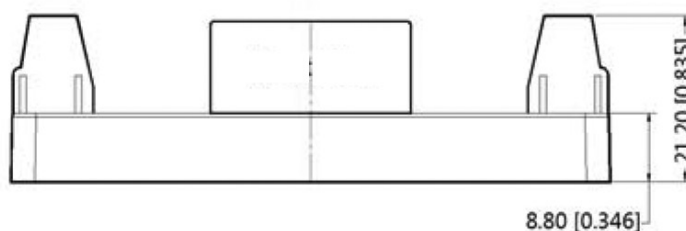
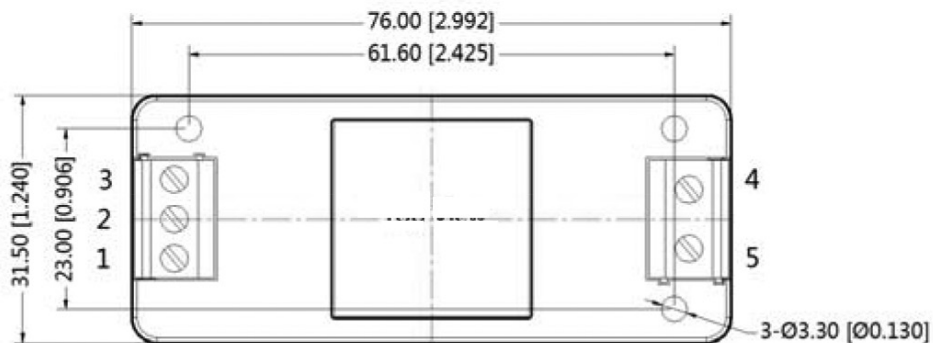
Note: Grid 2.54*2.54mm
Recommended PCB Layout
Top View

MECHANICAL DRAWING (CHASSIS MOUNT)

units: mm [inch]
tolerance: ±0.50[±0.020]

wire range: 24~12 AWG
tightening torque: 0.4 N*m max

| PIN CONNECTIONS | |
|-----------------|----------|
| PIN | Function |
| 1 | +Vin |
| 2 | -Vin |
| 3 | GND |
| 4 | -Vout |
| 5 | +Vout |

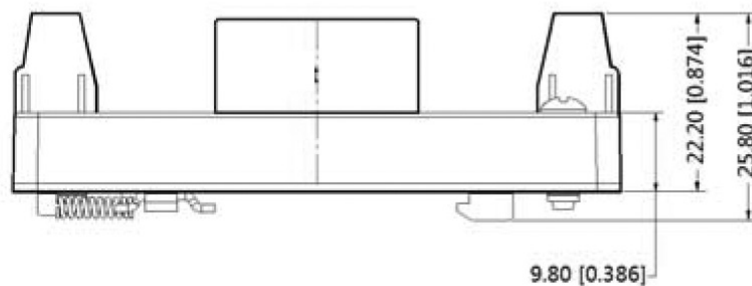
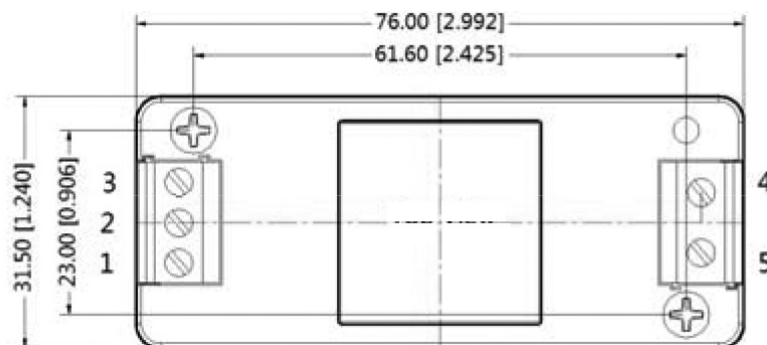


MECHANICAL DRAWING (DIN-RAIL MOUNT)

units: mm [inch]
tolerance: ±0.50[±0.020]

installed on DIN rail TS35
wire range: 24~12 AWG
tightening torque: 0.4 N*m max

| PIN CONNECTIONS | |
|-----------------|----------|
| PIN | Function |
| 1 | +Vin |
| 2 | -Vin |
| 3 | GND |
| 4 | -Vout |
| 5 | +Vout |



APPLICATION CIRCUIT

Figure 1
Application Circuit

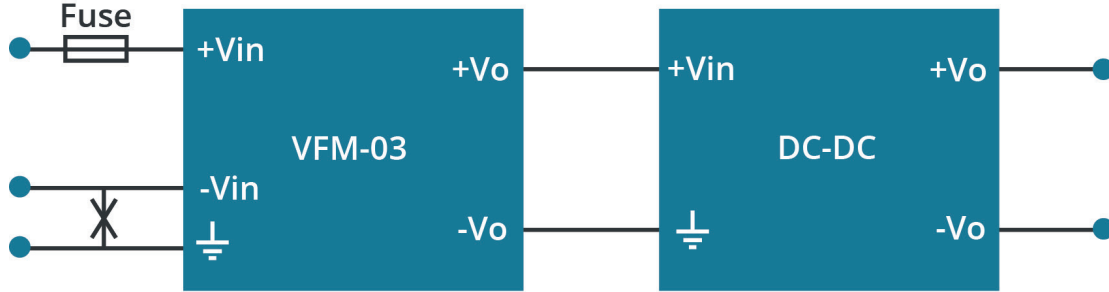
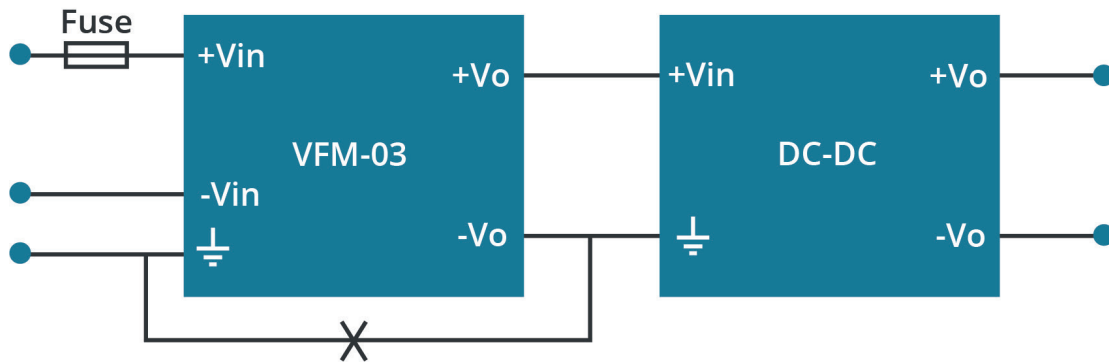


Figure 2
Non-supported Application for Module



REVISION HISTORY

| rev. | description | date |
|------|--|------------|
| 1.0 | initial release | 12/17/2018 |
| 1.01 | circuit figures updated, packaging removed | 01/25/2022 |

The revision history provided is for informational purposes only and is believed to be accurate.



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