

PRODUCT PROGRAM

| Model | Input Voltage (V) | Output Voltage (V) | Output Current max (MA) | Isolation (VDC) | Max Capacitive Load (uF) | EQFQFiciency (%) |
|----------|-------------------|--------------------|-------------------------|-----------------|--------------------------|------------------|
| QF0503XM | 4.5-5.5 | 3.3 | 75.7 | 3000 | 100 | 66 |
| QF0505XM | 4.5-5.5 | 5 | 50 | 3000 | 100 | 66 |
| QF0507XM | 4.5-5.5 | 7.2 | 34.72 | 3000 | 100 | 66 |
| QF0509XM | 4.5-5.5 | 9 | 27.77 | 3000 | 100 | 68 |
| QF0512XM | 4.5-5.5 | 12 | 20.83 | 3000 | 100 | 68 |
| QF0515XM | 4.5-5.5 | 15 | 16.67 | 3000 | 100 | 68 |
| QF0518XM | 4.5-5.5 | 18 | 13.88 | 3000 | 100 | 68 |
| QF0524XM | 4.5-5.5 | | | | | |

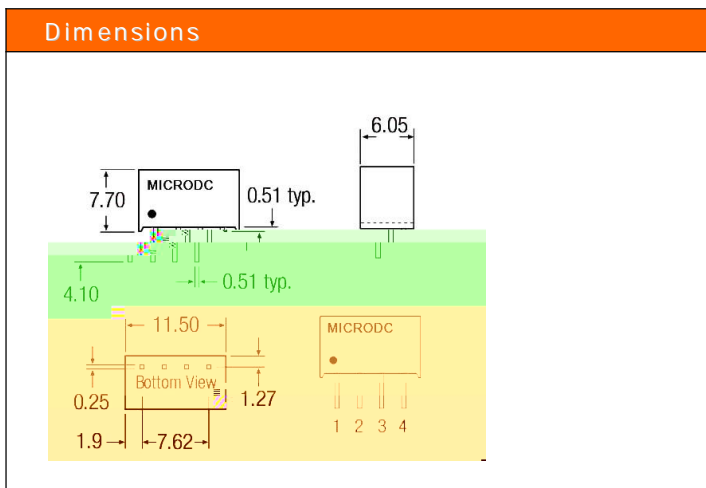
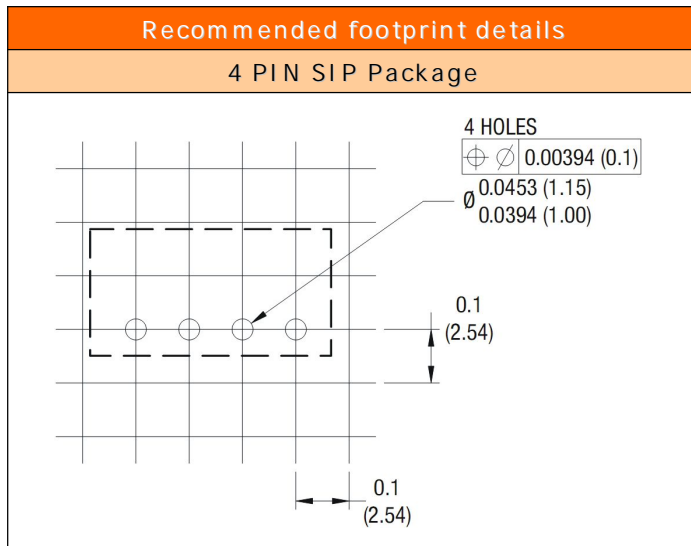
| Input Specifications | | | | |
|--------------------------------|-----------|-------------|---------|-------|
| Parameters | Nominal | Typical | Maximum | Units |
| Voltage range | 5 | 4.5-5.5 | | VDC |
| | 12 | 10.8-13.2 | | |
| | 15 | 13.5 - 16.5 | | |
| | 24 | 21.6-26.4 | | |
| Filter | Capacitor | | | |
| Turn on transient process time | | | 25 | ms |
| Start up time | | 200 | | ms |
| Absolute maximum rating | 5 Vin | 7 | | VDC |
| | 12 Vin | 15 | | |
| | 15 Vin | 17 | | |
| | 24 Vin | 28 | | |
| Peak input voltage time | | 100 | | ms |

| General Specifications | | | | |
|--------------------------|--|----------|------------------------|-------|
| Parameters | Conditions | Typical | Maximum | Units |
| Switching frequency | 100% load | 80 | | KHz |
| Operating temperature | Without derating | -40~+85 | | °C |
| Storage temperature | | -40~+125 | | °C |
| Maximum case temperature | | | 100 | °C |
| Cooling | Free air convection | | | |
| Humidity | | | 95 | % |
| Case material | Non-conductive black plastic | | | |
| Weight | | 1.5 | F | g |
| Dimensions (Lx W x H) | 0.46 x 0.24 x 0.38 inches | | 11.68 x 6.00 x 9.65 mm | |
| MTBF | >2 010 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25 °C) | | | |

NOTE: All specifications in this data sheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

| Output Specifications | | | | |
|---|----------------------|---------|---------|----------|
| Parameters | Conditions | Typical | Maximum | Units |
| Voltage accuracy | | ±3 | | % |
| Short circuit protection | Momentary (1sec) | | | |
| Line voltage regulation | For 1% change of Vin | ±1.2 | | % of Vin |
| Load voltage regulation | Load 20 – 100% | ±10 | | % |
| Load voltage regulation 3.3V output model | Load 20 – 100% | ±20 | | % |
| Temperature coefficient | | ±0.02 | | %/ C |
| Ripple & noise | At 20MHz Bandwidth | 100 | | mV p-p |
| Capacitive load | | | 100 | µF |
| Rising time | | 50 | | ms |

Isolation Specifications



Pin Out Specifications

| Pin | Single |
|-----|------------|
| 1 | - V Input |
| 2 | +V Input |
| 3 | - V Output |
| 4 | +V Output |



This series is compatible with RoHS soldering systems with a peak wave solder temperature of 300°C for 10 seconds. The pin termination finish on the SIP package type is Tin Plate, Hot Dipped over Matte Tin with Nickel Preplate. The DIP types are Matte Tin over Nickel Preplate. Both types in this series are backward compatible with Sn/Pb soldering systems.



This series has proven that this product does not contain harmful chemicals, it also has harmful chemical substances through the registration, inspection and approval.