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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Ideal Diode MODULE

TD-DIODE-1000 Technical Specification

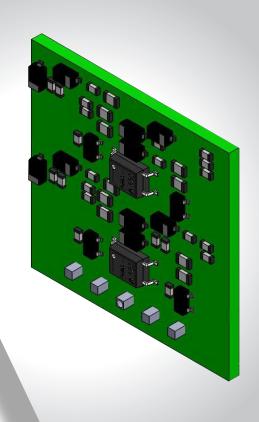
Up to 1000W AC-DC Full Bridge Rectifier

FEATURES

- Universal AC Input 85-265Vrms
- Low loss mosfet rectifier
- Low profile, small size
- Vertical or horizontal mount
- Conduction cooling

PRODUCT OVERVIEW

The Telcodium diode module provides a full wave rectified DC voltage output from a wide range of AC input source from 85Vrm to 265Vrms, with a very low lost compared to traditional diode bridge rectifiers. The ideal diode module uses a patented technology to take the AC source and fully rectifies the output. This module draws 10 times less power than a traditional diode bridge rectifier and doesn't need a heat sink or fan.

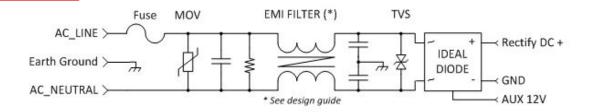


APPLICATIONS

- Power supply design front end
- Any DC full wave rectifier requirement up to 1000W, 265Vac rms
- High efficiency equipment design
- Convection cooling equipment



Figure 1.



SPECIFICATIONS

| PARAMETERS | MIN | TYP | MAX | UNITS | NOTES |
|--|--------|-------|---------|-------------|------------|
| Absolute maximum Rating | | | | | |
| Operating temperature | -40.00 | - | 100.00 | С | |
| Storage temperature | -45.00 | - | 125.00 | С | |
| Humidity (non condensing) | | | | | |
| Operating | 20.00 | - | 95.00 | % | RH |
| Non-Operating | 10.00 | - | 95.00 | % | RH |
| Input characteristic (L to N) | | | | | |
| Operating input voltage | | | | | |
| AC input continuous | 85.00 | - | 265.00 | Vrms | |
| Operating input frequency | 45.00 | - | 65.00 | Hz | |
| Maximum input power | - | - | 1000.00 | W | Vin>85Vrms |
| Maximum input current | - | - | 12.00 | Α | Vin=85Vrms |
| Aux input voltage | 11.00 | 12.00 | 17.00 | Vdc | |
| Aux input current | 10.00 | - | 20.00 | mA | |
| Reliability Characteristics | | | | | |
| Calculated MTBF (MIL-217) MIL-HDBK-217F | - | 10.00 | - | 10^6 HRS | |
| Standards Compliance UL 60950-1/R2011-12 CAN/CSA-C22.2 No. 60950-1/A1:2011 EN60950-1/A12:2011 CE marking | | | | | Tb=70C |
| Mechanical | | | | | |
| Size (WxHxL) | | | | | |
| Weight | | | | | |

Table 1

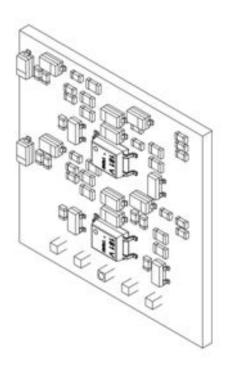


OUTLINE DRAWING

Figure 2.

Top View 1200 mils 00000 1

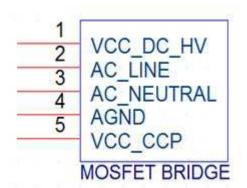
Isometric View



- ✓ See design guide PCB layout for proper clearance and trace width routing ✓ Connector TE 640385-5 , 0.156" (3.96mm)



Symbol



Top View Pinout

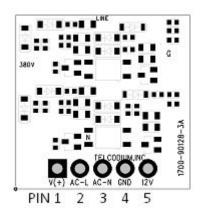


Figure 3.

ELECTRICAL CONNECTIONS

Pinout description

- Pin1: DC rectified output full wave rectified
- Pin2: AC line input
- Pin3: AC Neutral input
- Pin4: Ground none-isolated section
- Pin5: Auxiliary 12Vdc power source (20 mA max), see design guide

✓ See design guide for connections and AC input EMI FILTER design



RoHS COMPLIANCE

The EU led RoHS (Restriction of Hazardous Substances) Directive bans the use of Lead, Cadmium, Hexavalent Chromium, Mercury, Polybrominated Biphenyls (PBB), and Polybrominated Diphenyl Ether (PBDE) in Electrical and Electronic Equipment. Telcodium product is 6/6 RoHS compliant. For more information please refer to the Telcodium website RoHS addendum.





HEADQUARTERS

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