

CD2S THRU CD10S

SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

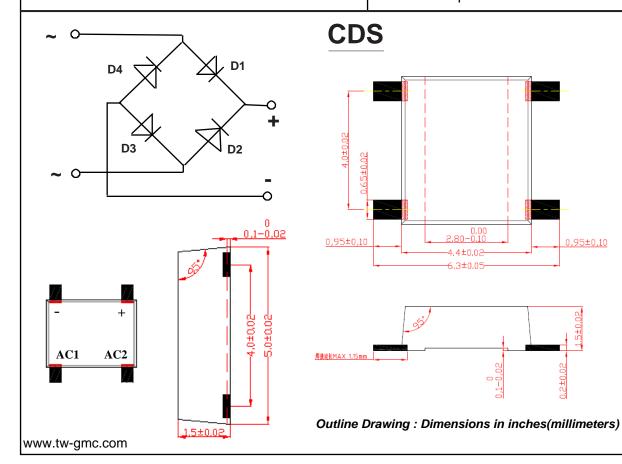
Bridge Rectifier Datasheet

These are powerful bridge rectifiers with enhanced Glass Passivated Junction P-N chips. They are advanced rectifiers designed, tested and guaranteed to withstand a specified level of energy in the forward mode of operation. All of these rectifiers are designed for applications such as, switching convertors. They have the low negative leakage and low forward voltage drop, which allows these types to be operated directly from integrated circuits.

Features:

- ◆ 1A, 200 1000V
- Glass passivated junction
- Ideal for printed circuit board
- Thin body, flat lead
- High temperature soldering guaranteed: 260 °C /10seconds/ 0.375"(9.5mm)
- Leads solderable per MIL-STD-202, Method 208
- ❖ High reliability under 125°C working environment, with the limit temperature 150°C

0,95±0,10



Based on MIL-STD-105E LEVEL II, set the acceptable level as below.

| Item | Critical | Major | Minor | | |
|---------|----------|------------------|-------|--|--|
| | | 0.10(Electrical) | | | |
| AQL (%) | 0.01 | 0.25(Physical) | 1.00 | | |

Signification, Storage and Shipment

- 1. The signification on the bridge rectifier body can be determined by customer. It will be 100% followed up as the instruction from customer.
- 2. The parts will be packed in the boxes, and the quantity in one box can be offered by customer. The boxes will be delivered by internal express company.
- 3. Please keep the parts being stored in the environment with humidity lower than 75%.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load derate current by 20%.

| TWGMC Catalog Number | SYMBOLS | TWGMC CD2S | TWGMC CD4S | TWGMC CD6S | TWGMC CD8S | TWGMC CD10S | UNITS |
|---|---------|---------------|---------------|---------------|---------------|----------------|--------------|
| Maximum repetitive peak reverse voltage | Vrrm | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum RMS voltage | VRMS | 140 | 280 | 420 | 560 | 700 | VOLTS |
| Maximum DC blocking voltage | VDC | 200 | 400 | 600 | 800 | 1000 | VOLTS |
| Maximum average forward rectified current at Ta=75℃ | lf(AV) | 1.0 | | | | | Amps |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 35 | | | | | Amps |
| Maximum instantaneous forward voltage drop per leg at 0.4A | VF | 1.0 | | | | | Volts |
| Maximum DC reverse current Ta=25℃ at rated DC blocking voltage Ta=75 ℃ | lR | 5.0 50 | | | | | uA uA |
| Typical junction capactiance per leg(Note) | CJ | 15 | | | | | pF |
| Typical thermal resistance per leg | RθJA | 30 | | | | | °C/W |
| Operating temperature range | TJ | -55 to +150 | | | | | °C |
| storage temperature range | Тѕтс | -55 to +150 | | | | | $^{\circ}$ C |

NOTES: Measured at 1.0MHz and applied reverse voltage of 4.0 volts.



RATINGS AND CHARACTERISTIC CURVES CD2S THRU CD10S

Typical Performance Curves

 $Tc = 25 \, C$, unless otherwise specified

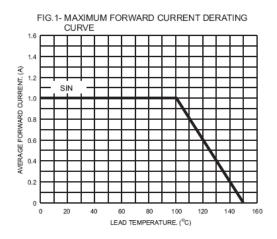


FIG.2- TYPICAL FORWARD CHARACTERISTICS

