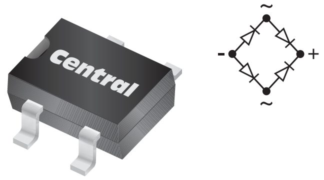
# CBR1U-D010S
# CBR1U-D020S

## SURFACE MOUNT
## 1 AMP ULTRA FAST
## SILICON BRIDGE RECTIFIER



**SMDIP CASE**

Central™
Semiconductor Corp.

www.centralsemi.com

**DESCRIPTION:**
The CENTRAL SEMICONDUCTOR CBR1U-D010S, CBR1U-D020S types are silicon full wave ultra fast bridge rectifiers mounted in a durable epoxy surface mount molded case, utilizing glass passivated chips.

**MARKING: FULL PART NUMBER**

**MAXIMUM RATINGS:**

| ($T_A$=25°C unless otherwise noted) | **SYMBOL** | **CBR1U-D010S** | **CBR1U-D020S** | **UNITS** |
|---|---|---|---|---|
| Peak Repetitive Reverse Voltage | $V_{RRM}$ | 100 | 200 | V |
| DC Blocking Voltage | $V_R$ | 100 | 200 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 70 | 140 | V |
| Average Forward Current ($T_A$=40°C) | $I_O$ | 1.0 | | A |
| Peak Forward Surge Current | $I_{FSM}$ | 50 | | A |
| Operating and Storage Junction Temperature | $T_J$, $T_{stg}$ | -65 to +150 | | °C |
| Thermal Resistance | $\Theta_{JA}$ | 40 | | °C/W |

**ELECTRICAL CHARACTERISTICS PER DIODE:** ($T_A$=25°C unless otherwise noted)

| **SYMBOL** | **TEST CONDITIONS** | **MIN** | **MAX** | **UNITS** |
|---|---|---|---|---|
| $I_R$ | $V_R$=Rated $V_{RRM}$ | | 5.0 | μA |
| $I_R$ | $V_R$=Rated $V_{RRM}$, $T_A$=125°C | | 1.0 | mA |
| $V_F$ | $I_F$=1.0A | | 1.05 | V |
| $t_{rr}$ | $I_F$=500mA, $I_R$=1.0A, $I_{rr}$=250mA | | 50 | ns |

R3 (4-January 2010)

**CBR1U-D010S**
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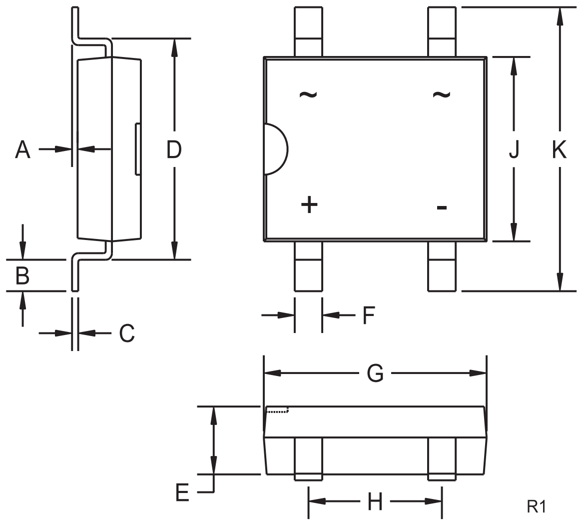
## SMDIP CASE - MECHANICAL OUTLINE



| DIMENSIONS | | | | |
|---|---|---|---|---|
| | INCHES | | MILLIMETERS | |
| SYMBOL | MIN | MAX | MIN | MAX |
| A | 0.004 | 0.008 | 0.10 | 0.20 |
| B | 0.040 | 0.060 | 1.02 | 1.52 |
| C | 0.009 | | 0.23 | |
| D | 0.290 | 0.310 | 7.37 | 7.87 |
| E | 0.086 | 0.098 | 2.18 | 2.49 |
| F | 0.038 | 0.042 | 0.97 | 1.07 |
| G | 0.316 | 0.335 | 8.03 | 8.51 |
| H | 0.195 | 0.205 | 4.95 | 5.21 |
| J | 0.245 | 0.255 | 6.22 | 6.48 |
| K | 0.360 | 0.410 | 9.14 | 10.41 |

SMDIP (REV: R1)

**MARKING: FULL PART NUMBER**

R3 (4-January 2010)