

CBRHDSH1-40L
HIGH DENSITY
1.0 AMP DUAL IN LINE
LOW V_F
SCHOTTKY BRIDGE RECTIFIER

HDBRIDGE



HD DIP CASE

CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBRHDSH1-40L is a full wave bridge rectifier mounted in a durable epoxy surface mount molded case, utilizing glass passivated chips.

MARKING CODE: CSH1

FEATURES:

- Low Leakage Current (20 μ A TYP @ V_{RRM})
- High 1.0A Current Rating
- Low V_F Schottky Diodes (440mV MAX @ $I_F=1.0A$)

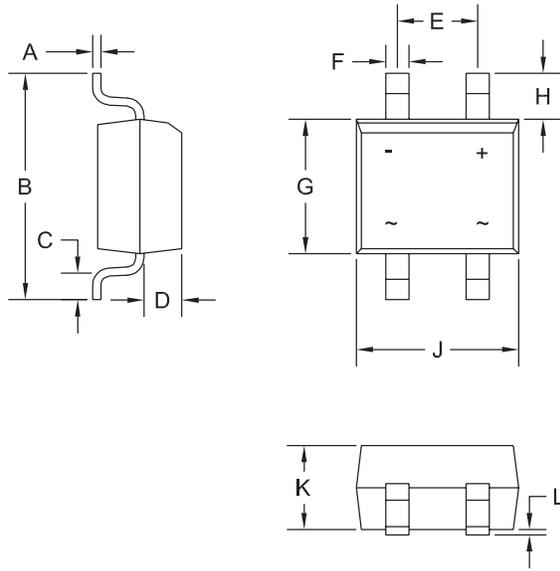
MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

| | SYMBOL | | UNITS |
|--------------------------------------|---------------|-------------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 40 | V |
| DC Blocking Voltage | V_R | 40 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 28 | V |
| Average Forward Current | I_O | 1.2 | A |
| Peak Repetitive Forward Current | I_{FRM} | 1.7 | A |
| Peak Forward Surge Current | I_{FSM} | 20 | A |
| Power Dissipation | P_D | 1.2 | W |
| Operating Junction Temperature Range | T_J | -50 to +125 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -50 to +150 | $^\circ\text{C}$ |
| Thermal Resistance | Θ_{JA} | 85 | $^\circ\text{C/W}$ |

ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | TYP | MAX | UNITS |
|---------------|----------------------------------|------------|------------|---------------|
| I_R | $V_R=40V$ | 20 | 50 | μA |
| I_R | $V_R=40V, T_A=100^\circ\text{C}$ | 5.0 | 20 | mA |
| V_F | $I_F=500\text{mA}$ | 360 | 380 | mV |
| V_F | $I_F=1.0A$ | 390 | 440 | mV |
| C_J | $V_R=4.0V, f=1.0\text{MHz}$ | 150 | | pF |

HD DIP CASE - MECHANICAL OUTLINE



R2

| DIMENSIONS | | | | |
|------------|--------|-------|-------------|------|
| SYMBOL | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 0.006 | 0.014 | 0.15 | 0.35 |
| B | - | 0.275 | - | 7.00 |
| C | 0.027 | 0.043 | 0.70 | 1.10 |
| D | 0.035 | 0.051 | 0.90 | 1.30 |
| E | 0.090 | 0.106 | 2.30 | 2.70 |
| F | 0.019 | 0.031 | 0.50 | 0.80 |
| G | 0.150 | 0.165 | 3.80 | 4.20 |
| H | 0.051 | 0.067 | 1.30 | 1.70 |
| J | 0.177 | 0.193 | 4.50 | 4.90 |
| K | 0.090 | 0.106 | 2.30 | 2.70 |
| L | 0.000 | 0.008 | 0.00 | 0.20 |

HD DIP (REV: R2)

MARKING CODE: CSH1

R3 (29-April 2009)