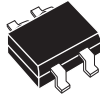




**CBRHDSH1-90**  
**CBRHDSH1-100**

**HIGH DENSITY**  
**1.0 AMP DUAL IN LINE**  
**SCHOTTKY BRIDGE RECTIFIER**

**HD BRIDGE**



**HD DIP CASE**

# Central<sup>TM</sup>

## Semiconductor Corp.

### DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBRHDSH1-90 and CBRHDSH1-100 are full wave bridge rectifiers in a durable epoxy surface mount molded case, designed for low voltage full wave rectification applications. The molding compound used in this device has UL flammability classification 94V-O.

### MARKING CODE:

**CBRHDSH1-90: CSH109**

**CBRHDSH1-100: CSH110**

### FEATURES:

- Low Leakage Current (100nA TYP @  $V_{RRM}$ )
- Low Forward Voltage Drop Schottky Diodes
- High 1.0A Current Rating
- Pb-Free Plating
- RoHS Compliant

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

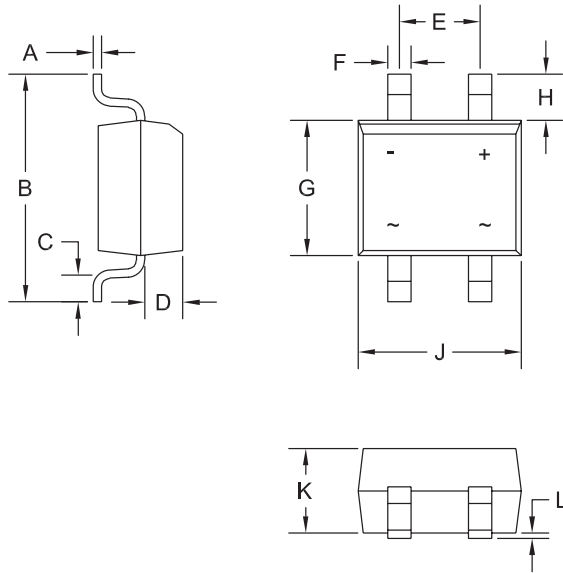
	SYMBOL	CBRHDSH1		UNITS
		-90	-100	
Peak Repetitive Reverse Voltage	$V_{RRM}$	90	100	V
DC Blocking Voltage	$V_R$	90	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	63	71	V
Average Forward Current	$I_O$		1.0	A
Peak Forward Surge Current	$I_{FSM}$		20	A
Power Dissipation	$P_D$		1.2	W
Operating Junction Temperature Range	$T_J$	-50 to +125		$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-50 to +150		$^\circ\text{C}$
Thermal Resistance	$\Theta_{JA}$	85		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=V_{RRM}$		0.1	10	$\mu\text{A}$
$I_R$	$V_R=V_{RRM}, T_A=100^\circ\text{C}$			20	mA
$BV_R$	$I_R=150\mu\text{A}$ (CBRHDSH1-90)	90			V
$BV_R$	$I_R=150\mu\text{A}$ (CBRHDSH1-100)	100			V
$V_F$	$I_F=500\text{mA}$		650	700	mV
$V_F$	$I_F=1.0\text{A}$		700	750	mV
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$		230		pF

R1 (19-October 2007)

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:**

CBRHDSH1-90: CSH109

CBRHDSH1-100: CSH110

R1 (19-October 2007)