### CBRHDSH1-100

SURFACE MOUNT
HIGH DENSITY
1 AMP SILICON
SCHOTTKY BRIDGE RECTIFIER





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## **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CBRHDSH1-100 is a full wave bridge rectifier 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: CSH110**

### **FEATURES:**

- Low Leakage Current (40nA TYP @ V<sub>RRM</sub>)
- Low Forward Voltage Drop Schottky Diodes
- High 1.0A Current Rating

# $\textbf{MAXIMUM RATINGS:} \ (T_{\mbox{\scriptsize A}} = 25 \ ^{\circ}\mbox{C unless otherwise noted})$

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
DC Blocking Voltage	$v_R$	100	V
RMS Reverse Voltage	V <sub>R</sub> (RMS)	71	V
Average Forward Current	IO	1.0	Α
Peak Forward Surge Current	I <sub>FSM</sub>	20	Α
Power Dissipation	$P_{D}$	1.2	W
Operating Junction Temperature	TJ	-50 to +125	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C
Thermal Resistance	$\Theta_{JA}$	85	°C/W

# **ELECTRICAL CHARACTERISTICS PER DIODE**: (T<sub>A</sub>=25°C unless otherwise noted)

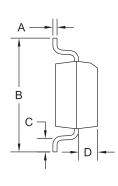
SYMBOL I <sub>R</sub>	TEST CONDITIONS V <sub>R</sub> =100V	MIN	<b>TYP</b> 0.04	<b>MAX</b> 10	<b>UNITS</b> μΑ
IR	V <sub>R</sub> =100V, T <sub>A</sub> =50°C			1.0	mA
$I_R$	V <sub>R</sub> =100V, T <sub>A</sub> =100°C			20	mA
$BV_R$	I <sub>R</sub> =150μA	100			V
$V_{F}$	I <sub>F</sub> =500mA		615	700	mV
$V_{F}$	I <sub>F</sub> =1.0A		690	750	mV
CJ	$V_R$ =4.0V, f=1.0MHz		230		pF

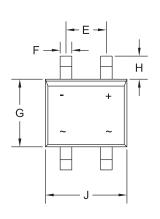
## CBRHDSH1-100

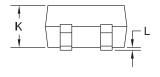
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## **HD DIP CASE - MECHANICAL OUTLINE**







R2

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.006	0.014	0.15	0.35			
В	ı	0.275	-	7.00			
С	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			
Н	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			
Ĺ	0.000	0.008	0.00	0.20			

HD DIP (REV: R2)

MARKING CODE: CSH110

R6 (22-May 2012)

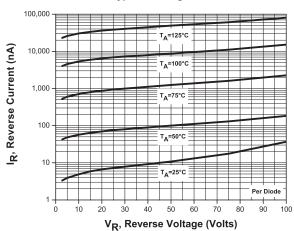
## CBRHDSH1-100

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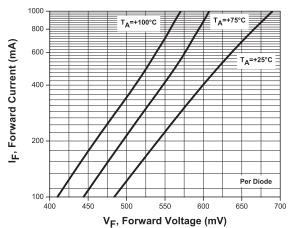


## TYPICAL ELECTRICAL CHARACTERISTICS





## Typical Forward Voltage



R6 (22-May 2012)

### **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**



#### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

#### **DESIGNER SUPPORT/SERVICES**

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- Custom product and package development

### REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

### **CONTACT US**

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