

**CBRLDSH1-40**  
**SURFACE MOUNT**  
**LOW PROFILE**  
**1 AMP SILICON**  
**SCHOTTKY BRIDGE RECTIFIER**



[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CBRLDSH1-40 is a full wave Schottky bridge rectifier mounted in a low profile epoxy surface mount molded case, utilizing glass passivated chips.



**MARKING CODE: CLP1**

**APPLICATIONS:**

- Solid state lighting (SSL)
- DC-DC converters
- Polarity protection

**FEATURES:**

- Low leakage current (16 $\mu$ A TYP @  $V_{RRM}$ )
- Low profile case (1.45mm MAX)
- Low  $V_F$  Schottky diodes (450mV TYP @  $I_F=1.0A$ )

**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	$I_O$	1.0	A
Peak Forward Surge Current ( $t_p=8.3\text{ms}$ )	$I_{FSM}$	30	A
Operating & Storage Junction Temperature	$T_J, T_{stg}$	-55 to +150	$^\circ\text{C}$
Thermal Resistance	$\Theta_{JA}$	95	$^\circ\text{C/W}$

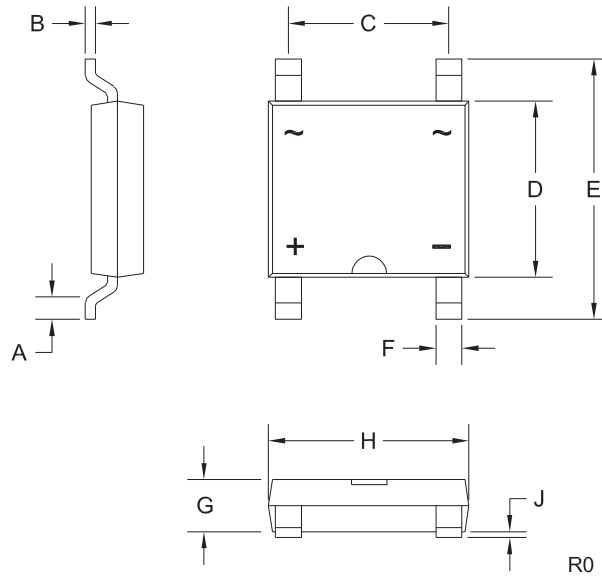
**ELECTRICAL CHARACTERISTICS PER DIODE:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_R$	$V_R=40\text{V}$		16	100	$\mu\text{A}$
$BV_R$	$I_R=0.1\text{mA}$	40	50		V
$V_F$	$I_F=1.0\text{A}$		450	500	mV
$C_J$	$V_R=4.0\text{V}, f=1.0\text{MHz}$		110		pF

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LPDIP CASE - MECHANICAL OUTLINE



DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.019	0.028	0.50	0.70
B	0.007	0.012	0.20	0.30
C	0.153	0.162	3.90	4.10
D	0.167	0.179	4.25	4.55
E	0.248	0.264	6.30	6.70
F	0.023	0.028	0.60	0.70
G	0.045	0.058	1.15	1.45
H	0.190	0.203	4.85	5.15
J	0.002	0.006	0.05	0.15

LPDIP (REV: R0)

MARKING CODE: CLP1

R1 (17-January 2012)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick 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

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### 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).

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### CONTACT US

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