

CBRDFSH1-40  
 CBRDFSH1-60  
 CBRDFSH1-100

**SURFACE MOUNT  
 1.0 AMP SILICON  
 SCHOTTKY BRIDGE RECTIFIERS**



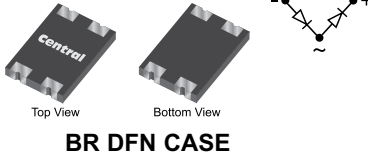
[www.centrasemi.com](http://www.centrasemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CBRDFSH1-40, CBRDFSH1-60, and CBRDFSH1-100 are 1.0 Amp full wave bridge rectifiers mounted in a durable epoxy surface mount case, utilizing glass passivated chips.

**MARKING CODES: CBRDFSH1-40: SH1-40  
 CBRDFSH1-60: SH1-60  
 CBRDFSH1-100: SH1100**

**BRIDGE**



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

|  |                | <b>CBRDFSH1</b> |            |             |                    |
|--|----------------|-----------------|------------|-------------|--------------------|
|  | <b>SYMBOL</b>  | <b>-40</b>      | <b>-60</b> | <b>-100</b> | <b>UNITS</b>       |
| Peak Repetitive Reverse Voltage                      | $V_{RRM}$      | 40              | 60         | 100         | V                  |
| DC Blocking Voltage                                  | $V_R$          | 40              | 60         | 100         | V                  |
| RMS Reverse Voltage                                  | $V_{R(RMS)}$   | 28              | 42         | 70          | V                  |
| Average Forward Current ( $T_A=50^{\circ}\text{C}$ ) | $I_O$          |                 | 1.0        |             | A                  |
| Peak Forward Surge Current (8.3ms)                   | $I_{FSM}$      |                 | 30         |             | A                  |
| Operating and Storage Junction Temperature           | $T_J, T_{stg}$ | -55 to +125     |            |             | $^{\circ}\text{C}$ |

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

| <b>SYMBOL</b> | <b>TEST CONDITIONS</b>                | <b>TYP</b> | <b>MAX</b> | <b>UNITS</b>  |
|---------------|---------------------------------------|------------|------------|---------------|
| $I_R$         | $V_R=40\text{V}$ (CBRDFSH1-40)        | 10         | 200        | $\mu\text{A}$ |
| $I_R$         | $V_R=60\text{V}$ (CBRDFSH1-60)        | 10         | 200        | $\mu\text{A}$ |
| $I_R$         | $V_R=100\text{V}$ (CBRDFSH1-100)      | 1.0        | 200        | $\mu\text{A}$ |
| $V_F$         | $I_F=1.0\text{A}$ (CBRDFSH1-40)       | 490        | 520        | mV            |
| $V_F$         | $I_F=1.0\text{A}$ (CBRDFSH1-60)       | 600        | 700        | mV            |
| $V_F$         | $I_F=1.0\text{A}$ (CBRDFSH1-100)      | 800        | 850        | mV            |
| $C_J$         | $V_R=4.0\text{V}$ , $f=1.0\text{MHz}$ |            | 250        | pF            |

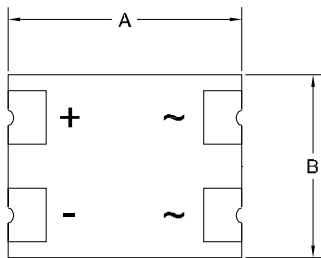
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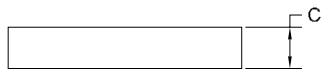


**BR DFN CASE - MECHANICAL OUTLINE**

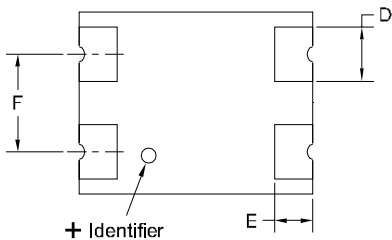
CASE DRAWING: BR DFN



TOP VIEW



SIDE VIEW



+ Identifier

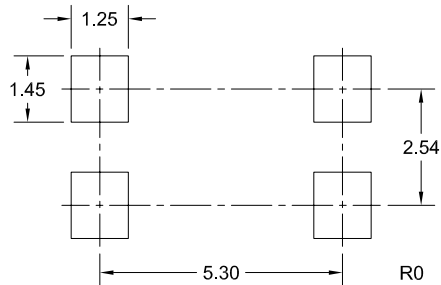
BOTTOM VIEW

R2

| SYMBOL | DIMENSIONS |       |             |      |
|--------|------------|-------|-------------|------|
|        | INCHES     |       | MILLIMETERS |      |
|        | MIN        | MAX   | MIN         | MAX  |
| A      | 0.238      | 0.246 | 6.05        | 6.25 |
| B      | 0.183      | 0.191 | 4.65        | 4.85 |
| C      | 0.032      | 0.048 | 0.81        | 1.22 |
| D      | 0.051      | 0.059 | 1.30        | 1.50 |
| E      | 0.037      | 0.041 | 0.95        | 1.05 |
| F      | 0.098      | 0.102 | 2.49        | 2.59 |

BR DFN (REV: R2)

**SUGGESTED MOUNTING PADS  
 (Dimensions in mm)**



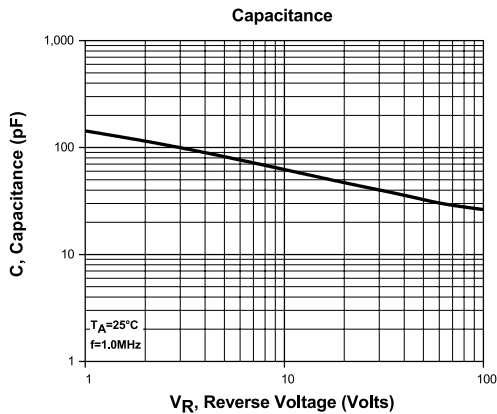
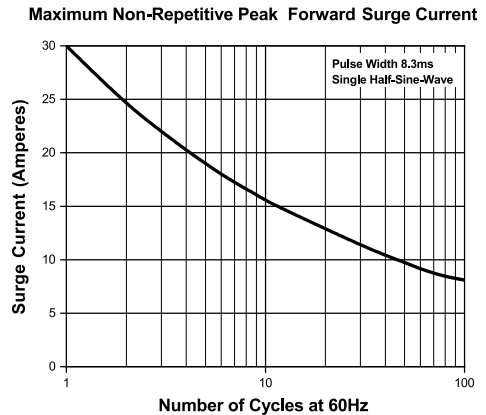
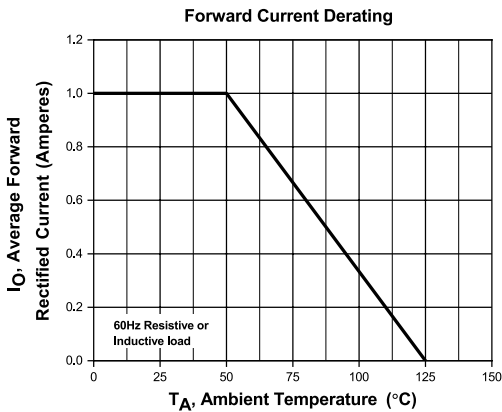
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 CBRDFSH1-60: SH1-60  
 CBRDFSH1-100: SH1100**

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TYPICAL ELECTRICAL CHARACTERISTICS

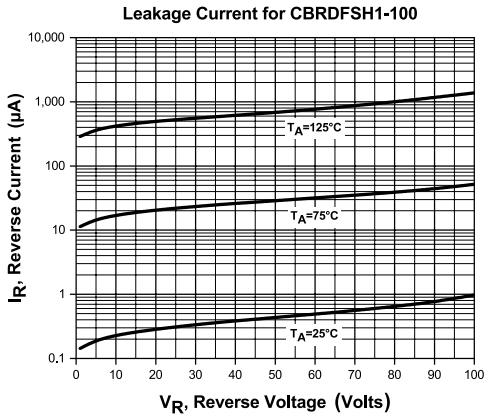
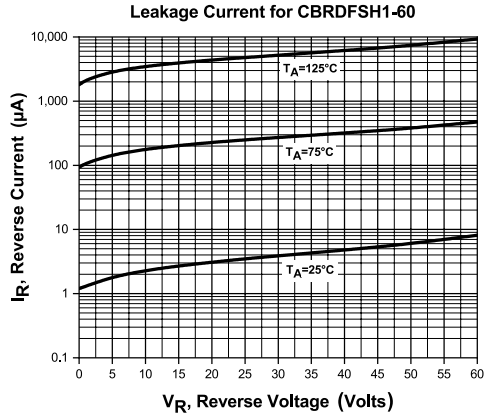
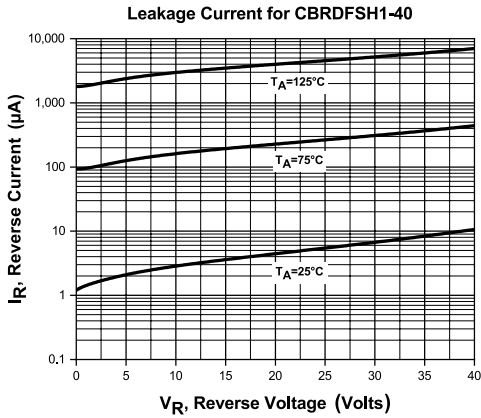


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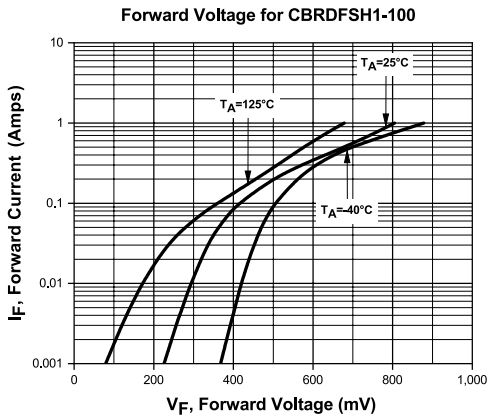
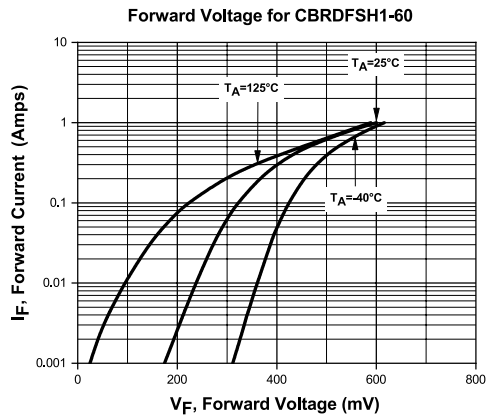
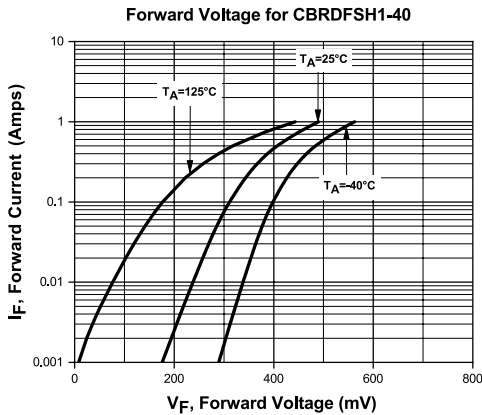


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### TYPICAL ELECTRICAL CHARACTERISTICS



## 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

#### Corporate Headquarters & Customer Support Team

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