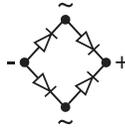


**CMKBR-6F**  
**SURFACE MOUNT**  
**SILICON BRIDGE RECTIFIER**

**ULTRAmmini™**



**SOT-363 CASE**

# Central™

**Semiconductor Corp.**

**FEATURES:**

- Monolithic construction
- Fast switching
- All diodes share closely matched electrical characteristics.
- Very small size

**DESCRIPTION:**

The Central Semiconductor CMKBR-6F is a monolithic silicon full wave bridge rectifier, epoxy molded in a SOT-363 surface mount package. This device has been designed for use in computers and peripheral equipment requiring high speed switching, small size, and closely matched  $V_F$ .

**MARKING CODE: CBR3**

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

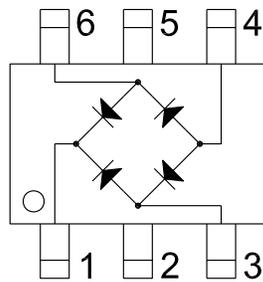
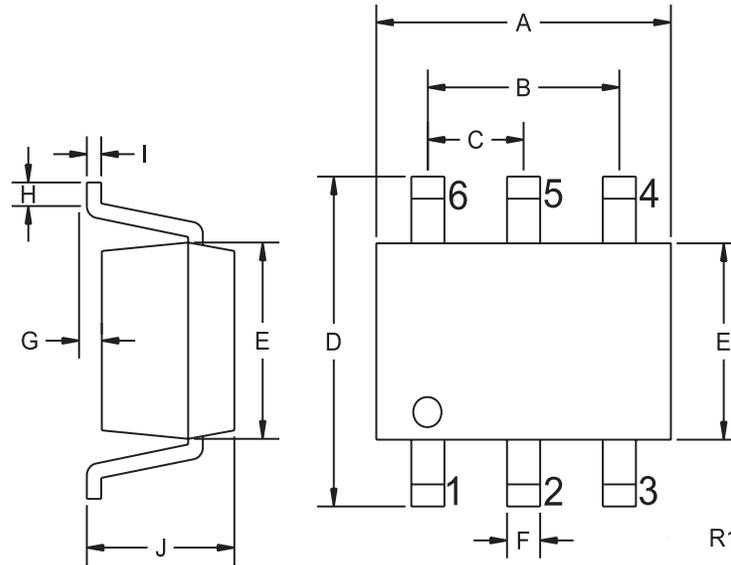
|                                 | SYMBOL         |             | UNITS |
|---------------------------------|----------------|-------------|-------|
| Peak Repetitive Reverse Voltage | $V_{RRM}$      | 60          | V     |
| Continuous Forward Current      | $I_F$          | 140         | mA    |
| Power Dissipation               | $P_D$          | 350         | mW    |
| Operating and Storage           |                |             |       |
| Junction Temperature            | $T_J, T_{stg}$ | -65 to +150 | °C    |
| Thermal Resistance              | $\theta_{JA}$  | 357         | °C/W  |

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

| SYMBOL   | TEST CONDITIONS              | MIN | TYP  | MAX | UNITS |
|----------|------------------------------|-----|------|-----|-------|
| $I_R$    | $V_R=50V$                    |     |      | 10  | nA    |
| $BV_R$   | $I_R=100\mu A$               | 60  |      |     | V     |
| $V_F$    | $I_F=20mA$                   |     |      | 1.0 | V     |
| $C_T$    | $V_R=0V, f=1.0MHz$           |     | 5.0  |     | pF    |
| $t_{rr}$ | $I_F=I_R=10mA, I_{rr}=1.0mA$ |     | 1000 |     | ns    |

**SURFACE MOUNT  
SILICON BRIDGE RECTIFIER**

**SOT-363 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) (+) DC
- 2) NC
- 3) AC
- 4) (-) DC
- 5) NC
- 6) AC

**MARKING CODE: CBR3**

| SYMBOL | INCHES |       | MILLIMETERS |      |
|--------|--------|-------|-------------|------|
|        | MIN    | MAX   | MIN         | MAX  |
| A      | 0.073  | 0.085 | 1.85        | 2.15 |
| B      | 0.051  |       | 1.30        |      |
| C      | 0.026  |       | 0.65        |      |
| D      | 0.075  | 0.091 | 1.90        | 2.30 |
| E      | 0.043  | 0.055 | 1.10        | 1.40 |
| F      | 0.006  | 0.012 | 0.15        | 0.30 |
| G      | 0.000  | 0.004 | 0.00        | 0.10 |
| H      | 0.010  | -     | 0.25        | -    |
| I      | 0.004  | 0.010 | 0.10        | 0.25 |
| J      | 0.031  | 0.039 | 0.80        | 1.00 |

SOT-363 (REV: R1)

R1 (27-April 2006)