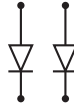


CMFD2004i

**SURFACE MOUNT
DUAL ISOLATED HIGH VOLTAGE
SILICON SWITCHING DIODES**



SOT-143 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMFD2004i consists of two electrically Isolated high voltage switching diodes packaged in an epoxy molded SOT-143 surface mount case. This device is designed for switching applications requiring dual high voltage diodes.

MARKING CODE: CJP

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

| | SYMBOL | | UNITS |
|--------------------------------------------------|----------------|-------------|----------------------|
| Continuous Reverse Voltage | V_R | 240 | V |
| Peak Repetitive Reverse Voltage | V_{RRM} | 300 | V |
| Peak Repetitive Reverse Current | I_O | 200 | mA |
| Continuous Forward Current | I_F | 225 | mA |
| Peak Repetitive Forward Current | I_{FRM} | 450 | mA |
| Peak Forward Surge Current, $t_p=1.0\mu\text{s}$ | I_{FSM} | 4.0 | A |
| Peak Forward Surge Current, $t_p=1.0\text{s}$ | I_{FSM} | 1.0 | A |
| Power Dissipation | P_D | 350 | mW |
| Operating and Storage Junction Temperature | T_J, T_{stg} | -65 to +150 | $^{\circ}\text{C}$ |
| Thermal Resistance | Θ_{JA} | 357 | $^{\circ}\text{C/W}$ |

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

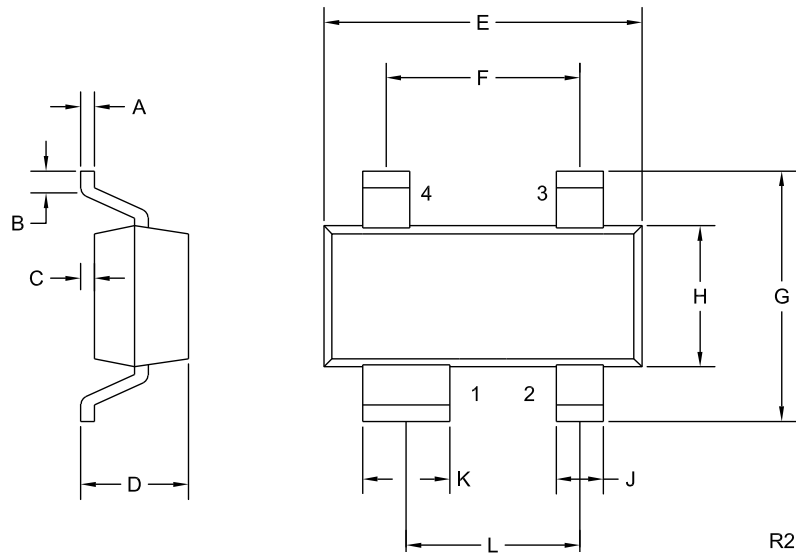
| SYMBOL | TEST CONDITIONS | MIN | MAX | UNITS |
|----------|-----------------------------------------------------------|-----|-----|---------------|
| I_R | $V_R=240\text{V}$ | | 100 | nA |
| I_R | $V_R=240\text{V}, T_A=150^{\circ}\text{C}$ | | 100 | μA |
| BV_R | $I_R=100\mu\text{A}$ | 300 | | V |
| V_F | $I_F=100\text{mA}$ | | 1.0 | V |
| C_T | $V_R=0, f=1.0\text{MHz}$ | | 5.0 | pF |
| t_{rr} | $I_F=I_R=30\text{mA}, I_{rr}=3.0\text{mA}, R_L=100\Omega$ | | 50 | ns |

CMFD2004i

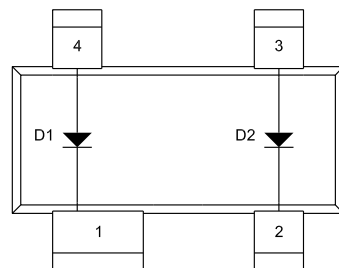
**SURFACE MOUNT
DUAL ISOLATED HIGH VOLTAGE
SILICON SWITCHING DIODES**



SOT-143 CASE - MECHANICAL OUTLINE



PIN CONFIGURATION



LEAD CODE:

- 1) Cathode D1
- 2) Cathode D2
- 3) Anode D2
- 4) Anode D1

MARKING CODE: CJP

| DIMENSIONS | | | | |
|------------|--------|-------|-------------|------|
| SYMBOL | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 0.003 | 0.006 | 0.08 | 0.15 |
| B | 0.006 | - | 0.15 | - |
| C | - | 0.005 | - | 0.13 |
| D | - | 0.045 | - | 1.14 |
| E | 0.110 | 0.120 | 2.79 | 3.04 |
| F | 0.075 | | 1.90 | |
| G | - | 0.098 | - | 2.50 |
| H | 0.047 | 0.055 | 1.19 | 1.40 |
| J | 0.014 | 0.020 | 0.36 | 0.50 |
| K | 0.030 | 0.037 | 0.76 | 0.93 |
| L | 0.067 | | 1.70 | |

SOT-143 (REV: R2)

R5 (13-August 2010)

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 quick ship samples (2nd 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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