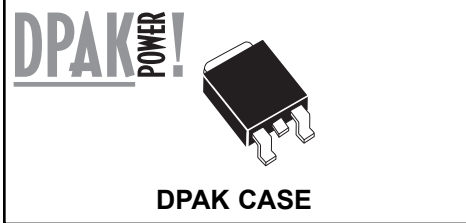


CUD6-02A
SURFACE MOUNT
ULTRA-FAST RECOVERY
RECTIFIER
DUAL, COMMON ANODE
6.0 AMPS, 200 VOLTS



CentralTM
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CUD6-02A, Silicon Ultra-Fast Recovery Rectifier is a high quality, well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications.

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

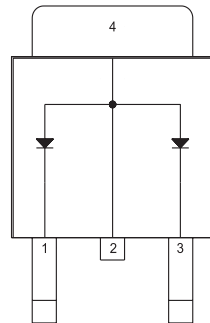
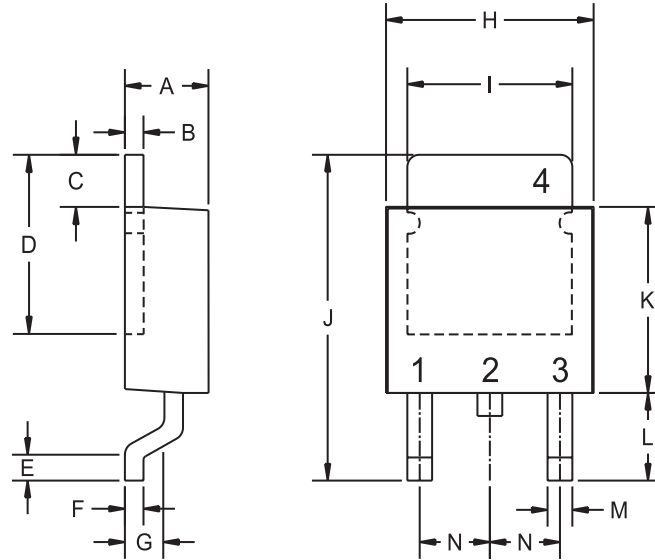
| | SYMBOL | | UNIT |
|---|-------------------|-------------|---------------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 200 | V |
| Peak Non Repetitive Surge Reverse Voltage | V_{RSM} | 200 | V |
| Average Forward Current ($T_C=130^\circ\text{C}$) | I_O | 6.0 | A |
| RMS Forward Current Per Diode | $I_F(\text{RMS})$ | 10 | A |
| Peak Forward Surge Current Per Diode (tp=10ms) | I_{FSM} | 70 | A |
| Critical Rate of Rise of Reverse Voltage | dV/dt | 10,000 | V/ μs |
| Operating and Storage Junction Temperature | T_J, T_{stg} | -65 to +150 | $^\circ\text{C}$ |
| Thermal Resistance, Per Diode | Θ_{JC} | 5.0 | $^\circ\text{C}/\text{W}$ |

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

| SYMBOL | TEST CONDITIONS | MIN | MAX | UNIT |
|----------|---|-----|------|---------------|
| I_R | $V_R=200\text{V}$ | | 20 | μA |
| I_R | $V_R=200\text{V}, T_C=100^\circ\text{C}$ | | 500 | μA |
| V_F | $I_F=10\text{A}$ | | 1.25 | V |
| V_F | $I_F=5.0\text{A}, T_C=100^\circ\text{C}$ | | 0.85 | V |
| t_{rr} | $V_R=30\text{V}, I_F=1.0\text{A}, di/dt=50\text{A}/\text{ms}$ | | 35 | ns |

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DPAK RECTIFIER CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode #1
- 2) Common Anode
- 3) Cathode #2
- 4) Common Anode

Pin 2 is common to the tab (4).

R1

| SYMBOL | DIMENSIONS | | | |
|--------|------------|-------|-------------|-------|
| | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 0.093 | 0.108 | 2.35 | 2.75 |
| B | 0.016 | 0.024 | 0.40 | 0.60 |
| C | 0.063 | | 1.60 | |
| D | 0.203 | 0.219 | 5.15 | 5.55 |
| E | 0.012 | 0.028 | 0.30 | 0.70 |
| F | 0.020 | | 0.50 | |
| G | 0.035 | 0.051 | 0.90 | 1.30 |
| H | 0.252 | 0.268 | 6.40 | 6.80 |
| I | 0.197 | 0.213 | 5.00 | 5.40 |
| J | - | 0.394 | - | 10.00 |
| K | 0.209 | 0.224 | 5.30 | 5.70 |
| L | 0.090 | 0.106 | 2.30 | 2.70 |
| M | 0.016 | 0.031 | 0.40 | 0.80 |
| N | 0.091 | | 2.30 | |

DPAK RECTIFIER (REV: R1)