

™

MCCD2004S

Features

- Case Material: Molded Plastic. UL Flammability Classificatio Rating 94-0 and MSL Rating 1
- Surface Mount SOT-23 Package
- Capable of 350mWatts of Power Dissipation
- Suited For Applications Requiring High Voltage Capability
- Marking Code: DB6

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 357°C/W Junction to Ambient

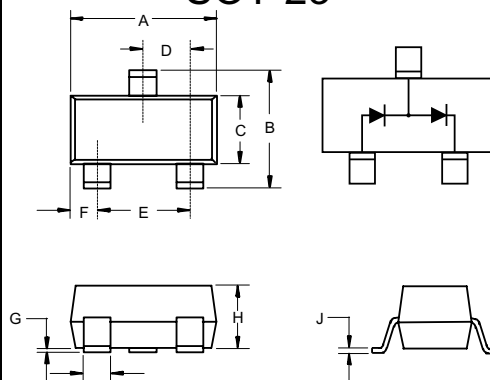
350 mW High Voltage Switching Diode 240 Volts

| Rating | Symbol | Value | Unit |
|--|-----------|-------|------|
| Continuous Reverse Voltage | V_R | 240 | V |
| Peak Repetitive Reverse Voltage | V_{RRM} | 300 | V |
| Rectified Current | I_O | 200 | mA |
| Continuous Forward Current | I_F | 225 | mA |
| Repetitive Peak Forward Current | I_{FRM} | 625 | mA |
| Forward Surge Current $t_p = 1ms$ | I_{FSM} | 4000 | mA |
| Forward Surge Current $t_p = 1s$ | I_{FSM} | 1000 | mA |
| Total Power Dissipation @ $T_A = 25^\circ C$ | P_D | 350 | mW |

Electrical Characteristics @ 25°C Unless Otherwise Specified

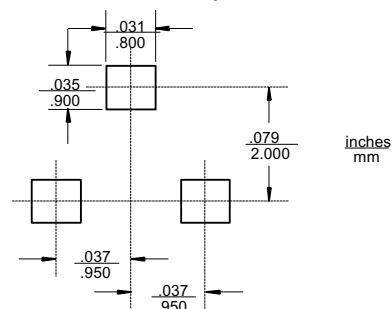
| Ratings | Symbol | Value | Test Condition |
|-----------------------------------|------------|-----------------------|---|
| Maximum Forward Voltage | V_F | 1.0 V | $I_F = 100mA$ |
| Maximum Reverse Current | I_R | 100 nA 100 μA | $V_R = 240V$ $V_R = 240V, T_A = 150^\circ C$ |
| Minimum Reverse Breakdown Voltage | $V_{(BR)}$ | 300 V | $I_R = 100\mu A$ |
| Maximum Junction Capacitance | C_T | 5.0 pF | $V_R = 0, f = 1MHz$ |
| Maximum Reverse Recovery Time | t_{rr} | 50 ns | $I_F = I_R = 30mA$, Rec. to 3.0mA, $R_L = 100\Omega$ |

SOT-23



| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .110 | .120 | 2.80 | 3.04 | |
| B | .083 | .098 | 2.10 | 2.64 | |
| C | .047 | .055 | 1.20 | 1.40 | |
| D | .035 | .041 | .89 | 1.03 | |
| E | .070 | .081 | 1.78 | 2.05 | |
| F | .018 | .024 | .45 | .60 | |
| G | .0005 | .0039 | .013 | .100 | |
| H | .035 | .044 | .89 | 1.12 | |
| J | .003 | .007 | .085 | .180 | |
| K | .015 | .020 | .37 | .51 | |

Suggested Solder Pad Layout



Ordering Information

| Device | Packing |
|------------------|----------------------|
| (Part Number)-TP | Tape&Reel;3Kpcs/Reel |

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