



Micro Commercial Components



Micro Commercial Components
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Features

- Halogen free available upon request by adding suffix "-HF"
- Designed for applications requiring high voltage capability
- Low Current Leakage
- Small Outline Surface Mount Package
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Marking: B6D
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

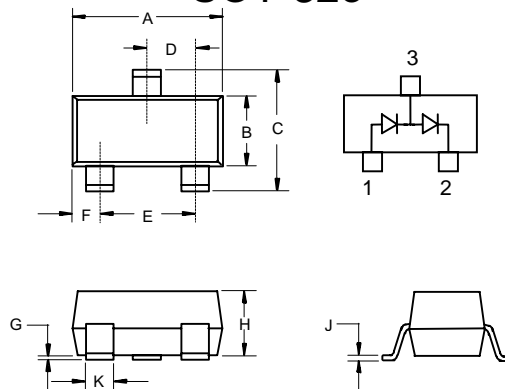
| Parameter | Symbol | Limits | Unit |
|-------------------------------------|-----------|--------|------|
| Non-Repetitive Peak reverse voltage | V_{RM} | 300 | V |
| DC Blocking Voltage | V_R | 240 | V |
| Continuous Forward Current | I_F | 225 | mA |
| Peak Repetitive Forward Current | I_{FRM} | 625 | mA |
| Forward Surge Current @t=1us | I_{FSM} | 4.0 | A |
| @t=1s | | 1.0 | A |
| Power Dissipation | P_D | 250 | mW |

| Parameter | Symbol | Test Conditions | MIN | MAX | UNIT |
|---------------------------------|----------|-------------------------------|-----|-----|---------|
| Reverse breakdown voltage | V_{BR} | $I_R=100\mu A$ | 240 | ... | V |
| Reverse voltage leakage current | I_R | $V_R=240V$ | ... | 0.1 | μA |
| Forward voltage | V_F | $I_F=100mA$ | ... | 1 | V |
| Diode capacitance | C_D | $V_R=0V, f=1MHz$ | ... | 5 | pF |
| Reverse recovery time | T_{rr} | $I_F=I_R=30mA, R_L=100\Omega$ | ... | 50 | ns |

MMBD2004SWT

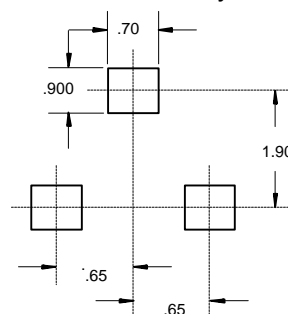
250mW 300Volt Dual Series Switching Diode

SOT-323

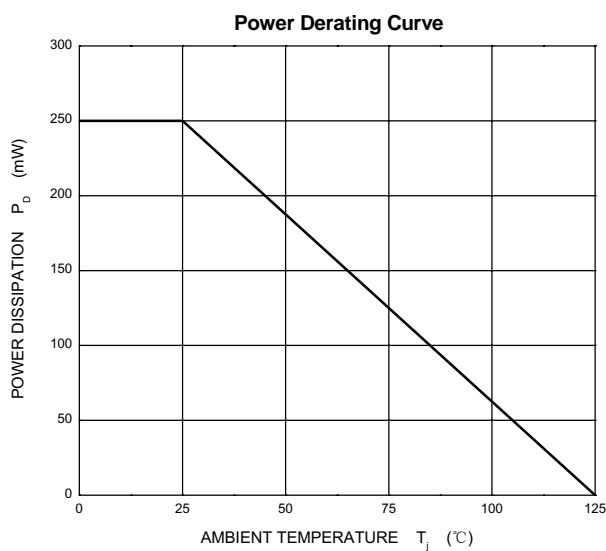
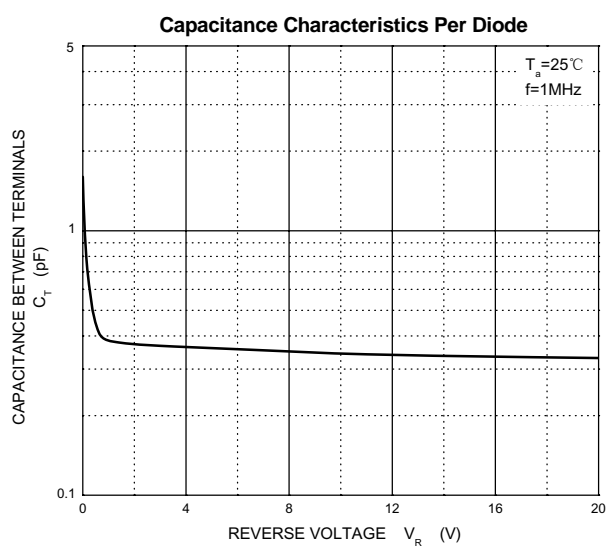
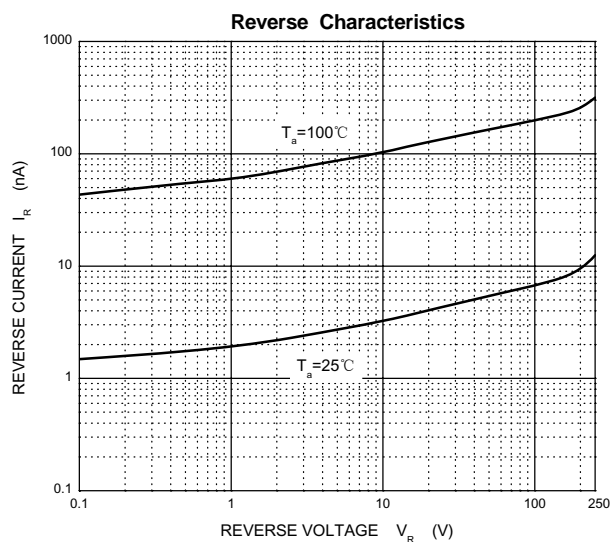
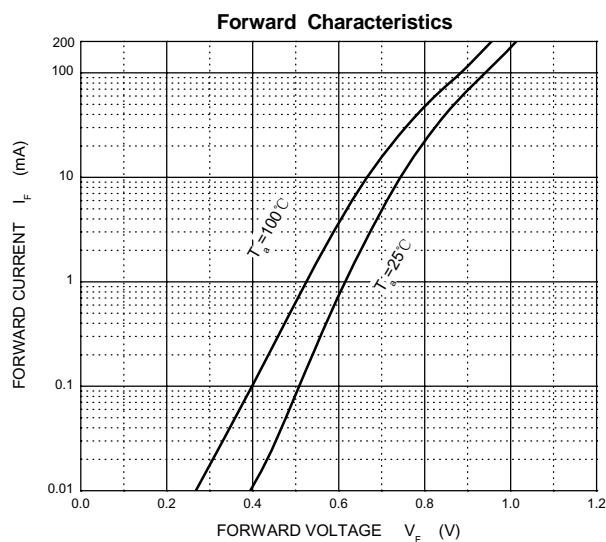


| DIM | INCHES | | MM | | NOTE |
|-----|--------------|------|--------------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .079 | .087 | 2.00 | 2.20 | |
| B | .045 | .053 | 1.15 | 1.35 | |
| C | .085 | .096 | 2.15 | 2.45 | |
| D | .026 Nominal | | 0.65 Nominal | | |
| E | .047 | .055 | 1.20 | 1.40 | |
| F | .012 | .016 | .30 | .40 | |
| G | .000 | .004 | .000 | .100 | |
| H | .035 | .039 | .90 | 1.00 | |
| J | .003 | .006 | .080 | .150 | |
| K | .008 | .016 | .20 | .40 | |

Suggested Solder Pad Layout



Typical Characteristics



Ordering Information :

| Device | Packing |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel |

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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