



Micro Commercial Components



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BAV199WT

Dual Series Switching Diode

Features

- Low Current Leakage
- Forward Current: $I_F=160\text{mA}$.
- Small Outline Surface Mount Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: K52
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

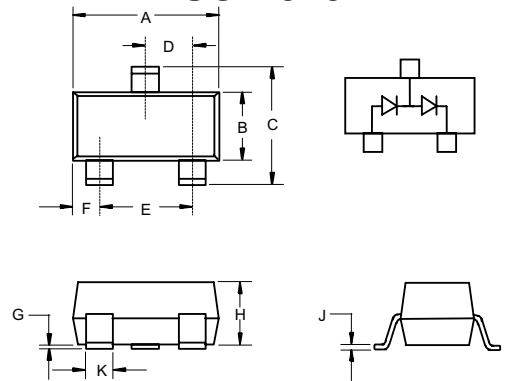
Maximum Ratings @ 25°C Unless Otherwise Specified

| Parameter | Symbol | Value |
|---|--------------|--------------------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 85V |
| Working Peak Reverse Voltage | V_{RWM} | 85V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 60V |
| Average Rectified Output Current | I_O | 160mA |
| Non-Repetitive Peak Forward Surge Current | I_{FSM} | 4A @1us 1A @1ms 0.5A @1s |
| Power Dissipation | P_{TOT} | 200mW |
| Thermal Resistance Junction to Ambient | R_{thJA} | 625°C/W |
| Operating Temperature | T_J | -55°C to +150°C |
| Storage Temperature | T_{stg} | -55°C to +150°C |

Electrical Characteristics @ 25°C Unless Otherwise Specified

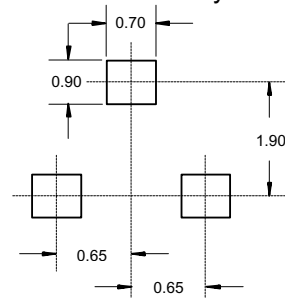
| Symbol | Parameter | Min | Typ | Max | Unit |
|----------|---|-----|-----|------------------------------|---------------|
| V_{BR} | Reverse Breakdown Voltage ($I_R=100\mu\text{A}$) | 85 | --- | --- | V |
| V_F | Forward Voltage $I_F=1.0\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$ | --- | --- | 0.90 1.00 1.10 1.25 | V |
| I_R | Leakage Current ($V_R=75\text{V}$) | --- | --- | 5.0 | nA |
| C_j | Junction Capacitance ($V_R=0, f=1.0\text{MHz}$) | --- | 2.0 | --- | pF |
| t_{rr} | Reverse recovery time | --- | --- | 3.0 | μs |

SOT-323

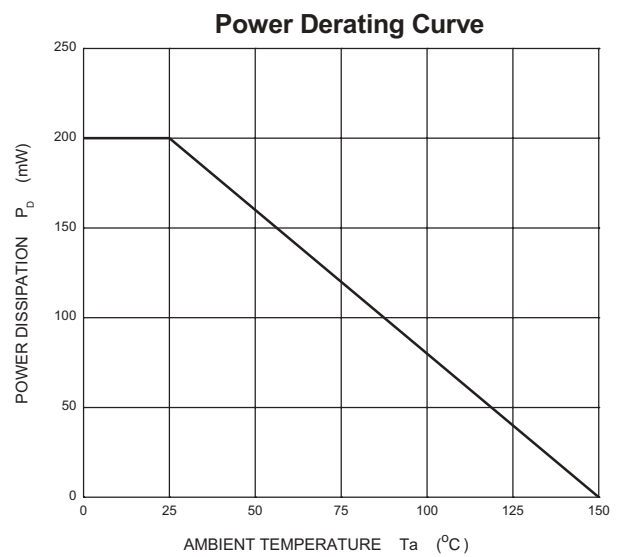
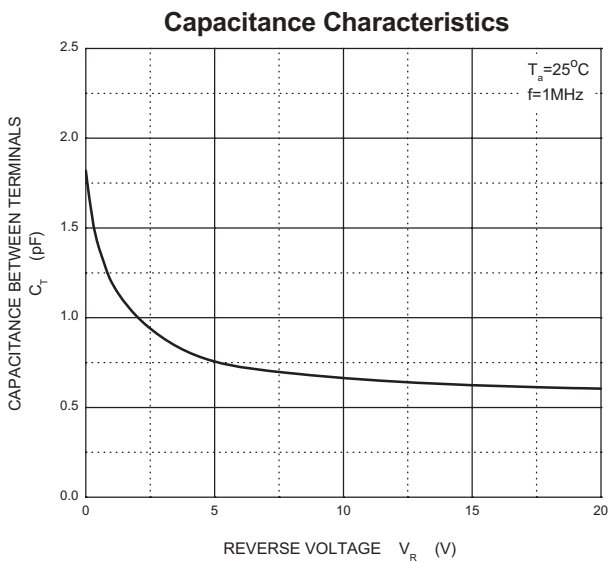
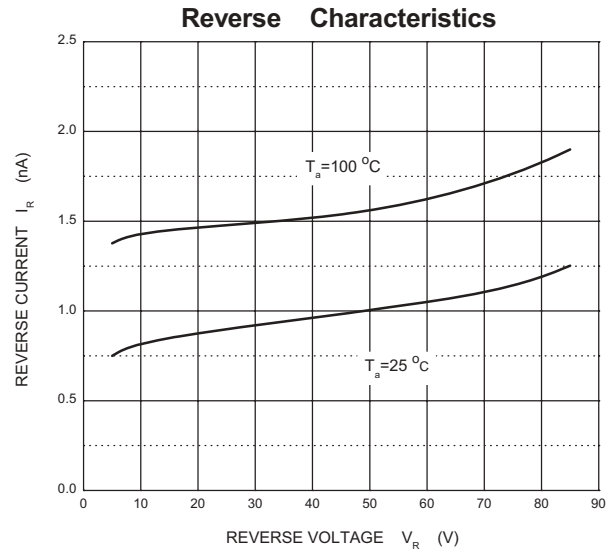
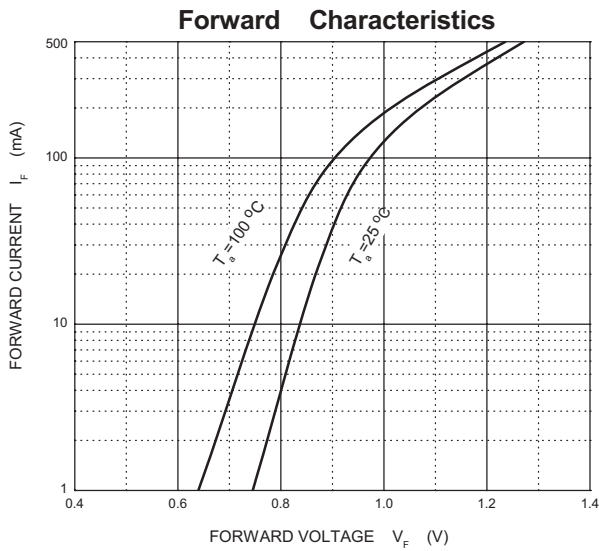


| DIM | INCHES | | MM | | NOTE |
|-----|--------------|------|--------------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | .071 | .087 | 1.80 | 2.20 | |
| B | .045 | .053 | 1.15 | 1.35 | |
| C | .083 | .096 | 2.10 | 2.45 | |
| D | .026 Nominal | | 0.65 Nominal | | |
| E | .047 | .055 | 1.20 | 1.40 | |
| F | .012 | .016 | .30 | .40 | |
| G | .000 | .004 | .000 | .100 | |
| H | .035 | .039 | .90 | 1.00 | |
| J | .004 | .010 | .100 | .250 | |
| K | .006 | .016 | .15 | .40 | |

Suggested Solder Pad Layout



Typical Characteristics





TM

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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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