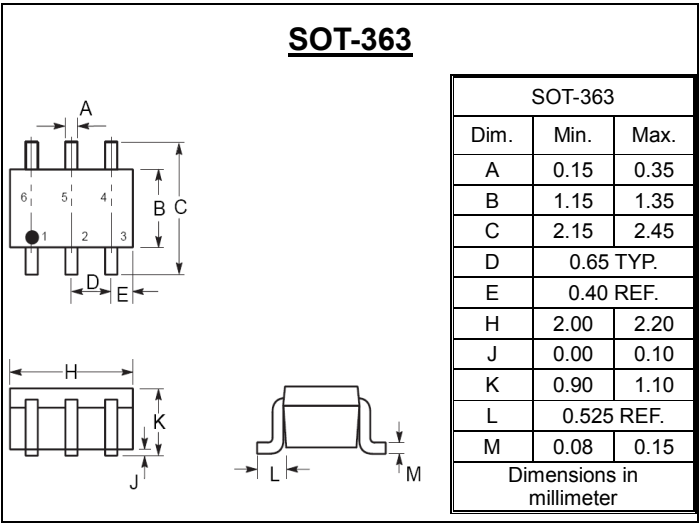


**SURFACE MOUNT
FAST SWITCHING DIODE**

**REVERSE VOLTAGE – 75 Volts
FORWARD CURRENT – 0.15 Ampere**

- FEATURES**
- Fast switching speed
 - Ideally suited for automatic insertion
 - For general purpose switching applications
- MECHANICAL DATA**
- Case: SOT-363 Plastic
 - Case material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
 - Moisture sensitivity: Level 1 per J-STD-020D
 - Lead free in RoHS 2002/95/EC compliant



Maximum Ratings & Thermal Characteristics @ T_A = 25°C unless otherwise specified

| Characteristic | Symbol | BAV99BRW | Units |
|---|------------------|-------------|-------|
| Repetitive Peak Reverse Voltage | V _{RRM} | 75 | V |
| Working Peak Reverse Voltage | V _{RWM} | | |
| DC Blocking Voltage | V _R | | |
| Forward Continuous Current | I _{FM} | 300 | mA |
| Average Rectified Output Current | I _O | 150 | mA |
| Non-Repetitive Peak Forward Surge Current | I _{FSM} | @t=1us 2 | A |
| | | @t=1s 1 | |
| Power Dissipation | P _D | 200 | mW |
| Thermal Resistance Junction to Ambient | R _{θJA} | 625 | °C/W |
| Operating Temperature Range | T _J | 150 | °C |
| Storage Temperature Range | T _{STG} | -65~+150 | °C |

Electrical Characteristics @ T_A = 25°C unless otherwise specified

| Characteristic | Test Condition | Symbol | Min. | Typ. | Max. | Unit |
|---|---|-----------------|------|------|--------------|------|
| Reverse Breakdown Voltage | I _R = 2.5uA | V _{BR} | 75 | -- | -- | V |
| Maximum Forward Voltage | I _F = 1mA | V _F | -- | -- | 715 | mV |
| | I _F = 10mA | | -- | -- | 855 | |
| | I _F = 50mA | | -- | -- | 1000 | |
| | I _F = 150mA | | -- | -- | 1250 | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | V _R = 75V V _R = 20V | I _R | -- | -- | 2.5 0.025 | uA |
| Typical Diode Capacitance | V _R = 0V, f=1MHz | C _D | -- | -- | 2 | pF |
| Reverse Recovery time | I _{rr} =1mA, I _R =I _F =10mA R _L =100Ω | trr | -- | -- | 4 | ns |

RATING AND CHARACTERISTIC CURVES BAV99BRW



Fig.1 Typical Forward Characteristics

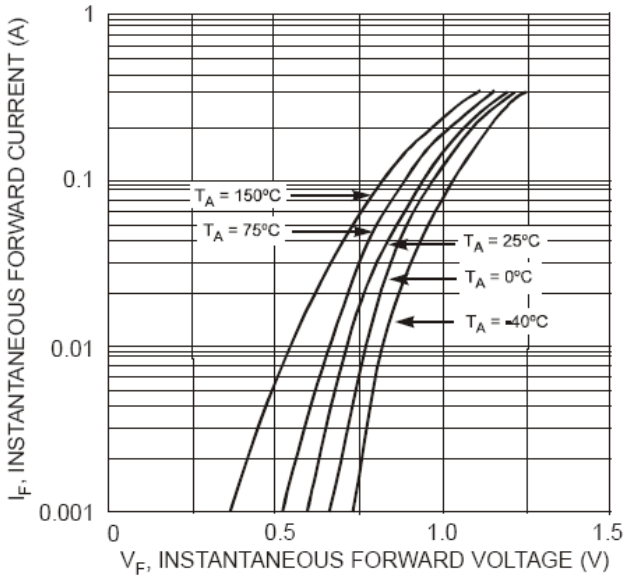


Fig.2 Typical Reverse Characteristics

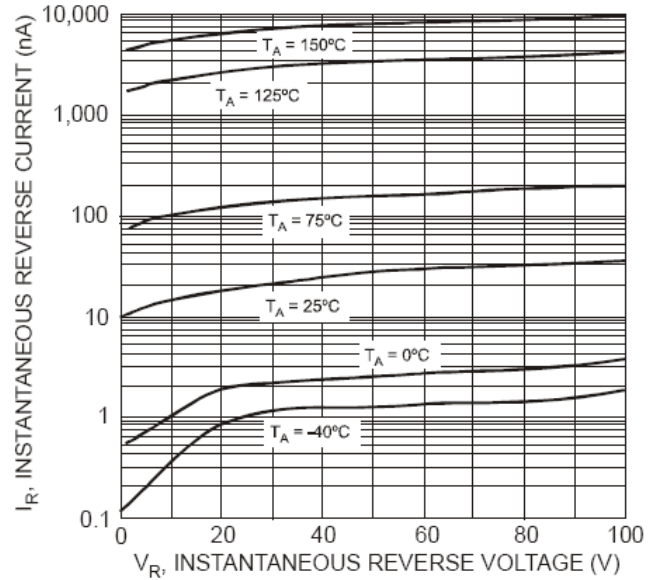


Fig.3 Total Capacitance vs. Reverse Voltage

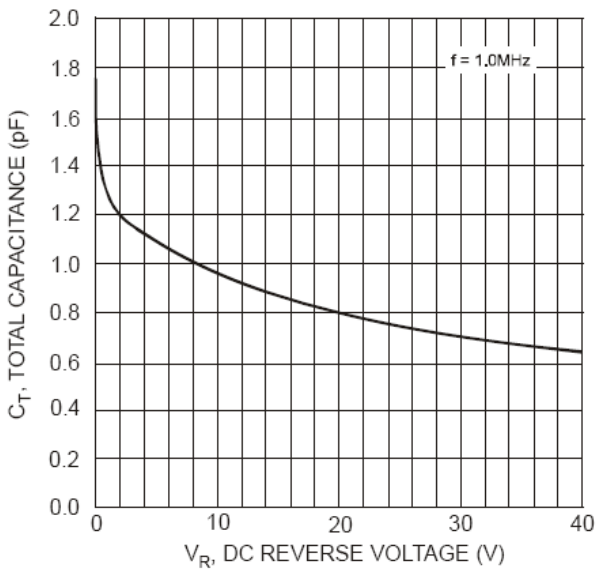
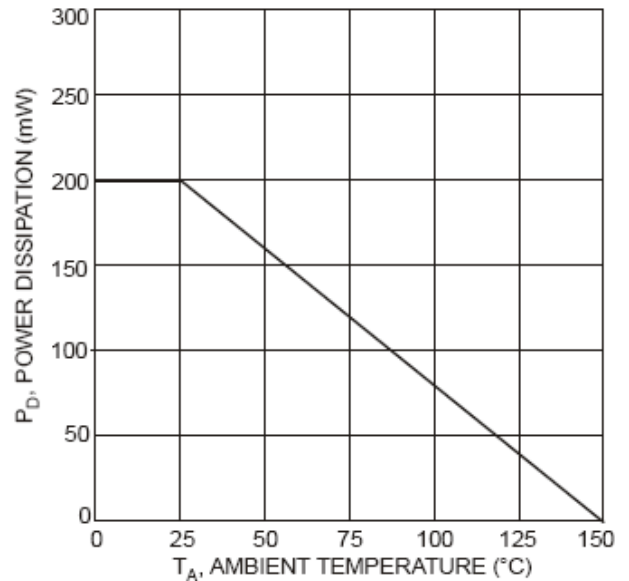


Fig.4 Power Derating Curve



Device Marking :

| Device P/N | Marking code | Equivalent Circuit Diagram |
|------------|--------------|----------------------------|
| BAV99BRW | KGJ | |

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