

Features

- Low Leakage Current
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 286°C/W Junction to Ambient

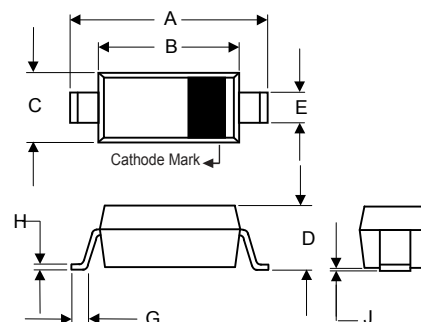
| MCC Part Number | Device Marking |
|-----------------|----------------|
| BAV116W | XX |

| Parameter | Symbol | Value |
|--------------------------------------|--------------|-------|
| Non-Repetitive Peak Reverse Voltage | V_{RM} | 130V |
| DC Reverse Voltage | V_R | 130V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 92V |
| Forward Continuous Current | I_{FM} | 500mA |
| Average Forward Current | $I_{F(AV)}$ | 215mA |
| Peak Forward Surge Current (t=8.3ms) | I_{FSM} | 1A |
| Power Dissipation | P_D | 350mW |

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

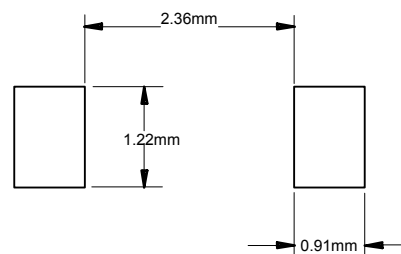
350mW SWITCHING DIODE 130 Volts

SOD-123



| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | 0.140 | 0.152 | 3.55 | 3.85 | |
| B | 0.100 | 0.112 | 2.55 | 2.85 | |
| C | 0.055 | 0.071 | 1.40 | 1.80 | |
| D | ---- | 0.053 | ---- | 1.35 | |
| E | 0.018 | 0.026 | 0.45 | 0.65 | |
| G | 0.006 | ---- | 0.15 | ---- | |
| H | ---- | 0.010 | ---- | 0.25 | |
| J | ---- | 0.006 | ---- | 0.15 | |

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Units |
|---------------------------|----------|---|------|------|------|---------|
| Reverse Breakdown Voltage | V_{BR} | $I_R=100\mu A$ | 130 | | | V |
| Forward Voltage | V_F | $I_F=1mA$ | | | 0.9 | V |
| | | $I_F=10mA$ | | | 1 | V |
| | | $I_F=50mA$ | | | 1.1 | V |
| | | $I_F=150mA$ | | | 1.25 | V |
| Reverse Current | I_R | $V_R=75V$ | | | 5 | nA |
| Junction Capacitance | C_J | $V_R = 0V, f = 1MHz$ | | | 2 | pF |
| Reverse Recovery Time | t_{rr} | $I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$ | | | 3 | μs |

* Pulse Test: Pulse Width 300 μs , Duty Cycle 2%

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

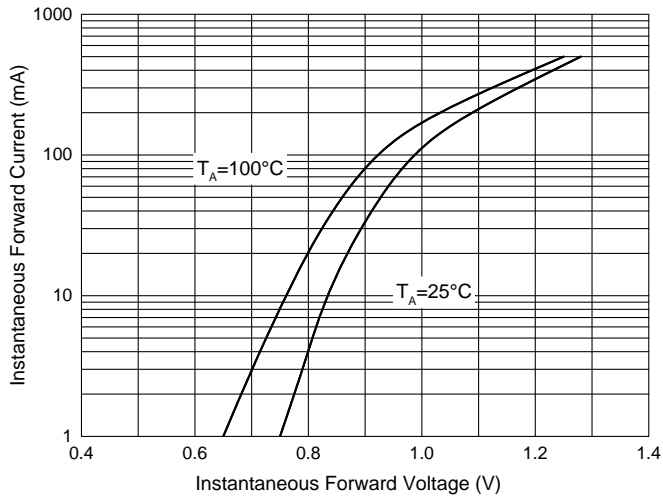


Fig. 2 - Typical Reverse Leakage Characteristics

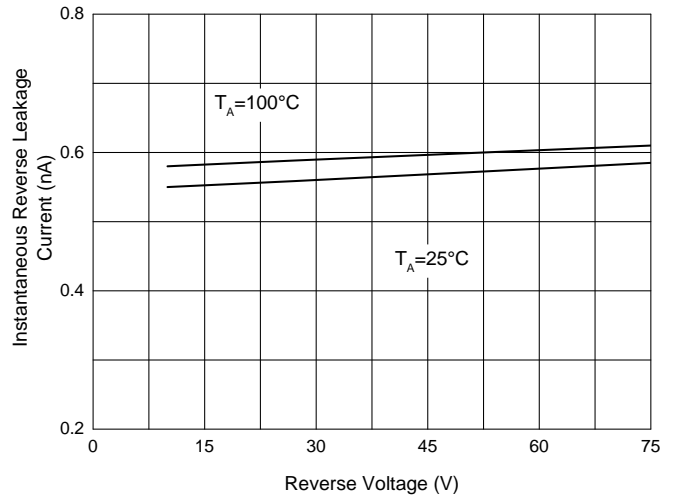
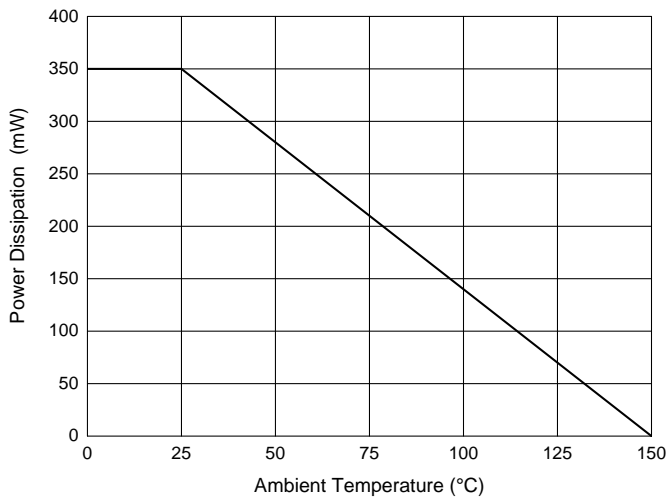


Fig. 3 - Power Derating Curve



Ordering Information

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

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