



FEATURES

- Average Rectified Output Current: $I_O=150$ mA
- High Conductance

Package Marking and Ordering Information

| Product ID | Pack | Marking | Qty(PCS) |
|------------|---------|---------|----------|
| BAV16W | SOD-123 | T6 | 3000 |
| 1N4148W | SOD-123 | T4 | 3000 |



MAXIMUM RATINGS (Ta=25 unless otherwise noted)

| Parameter | Symbol | Limit | Unit |
|---|-----------------|------------------|------|
| Non-Repetitive Peak Reverse Voltage | V_{RM} | 100 | V |
| Peak Repetitive Peak Reverse Voltage | V_{RRM} | 100 | V |
| Working Peak Reverse Voltage | V_{RWM} | | |
| DC Blocking Voltage | V_R | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 71 | V |
| Forward Continuous Current | I_{FM} | 300 | mA |
| Average Rectified Output Current | I_O | 150 | mA |
| Non-Repetitive Peak Forward Surge Current @t=8.3ms | I_{FSM} | 2.0 | A |
| Power Dissipation | P_d | 1N4148W 350 | mW |
| | | BAV16W 400 | |
| Thermal Resistance from Junction to Ambient(Note 1) | $R_{\theta JA}$ | 1N4148W 357.1 | °C/W |
| | | BAV16W 312.5 | |
| Operation Junction and Storage Temperature Range | T_J, T_{STG} | -55~+150 | °C |

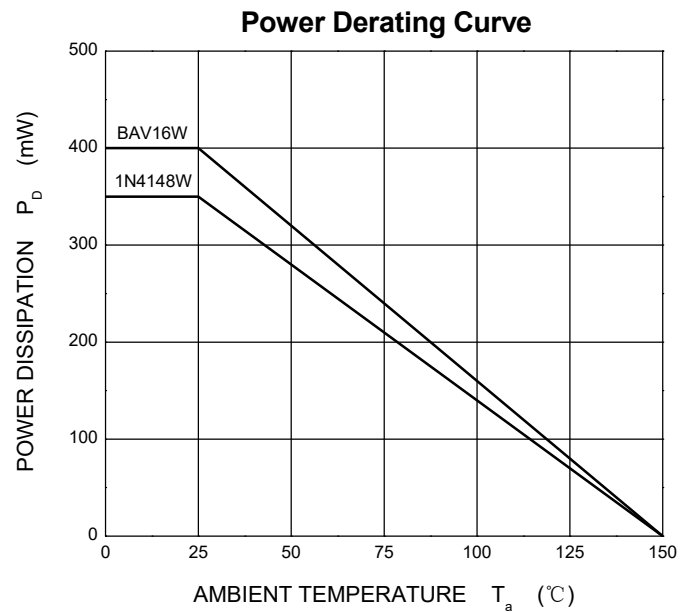
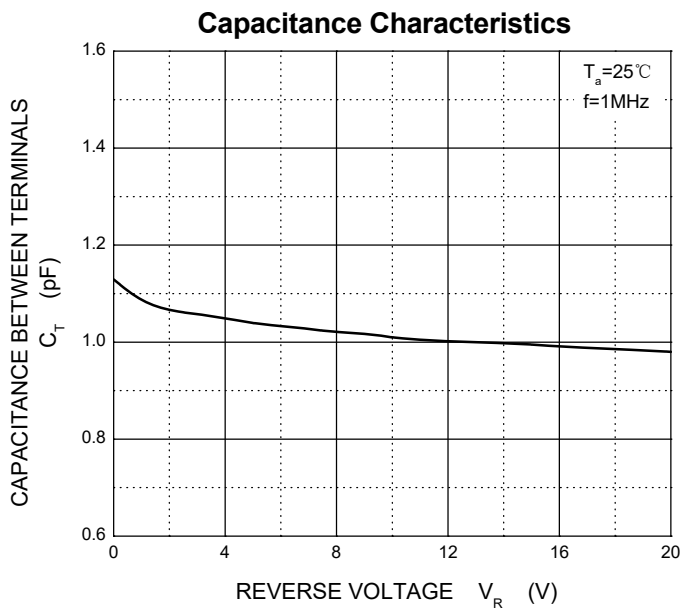
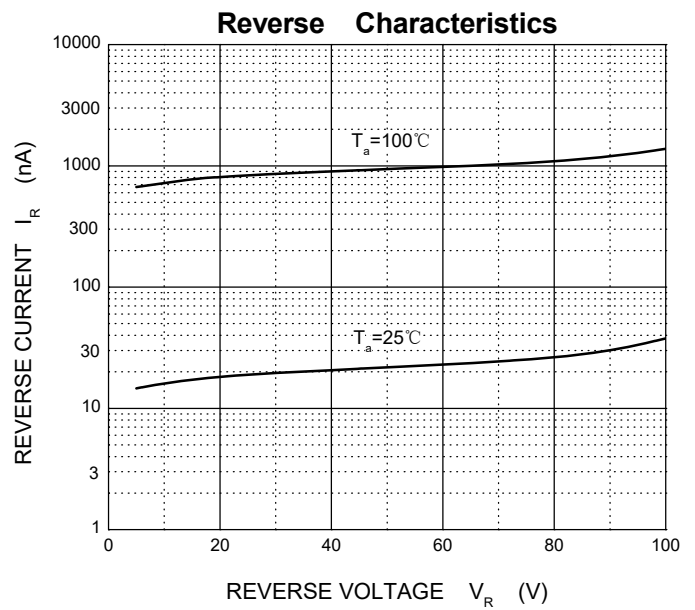
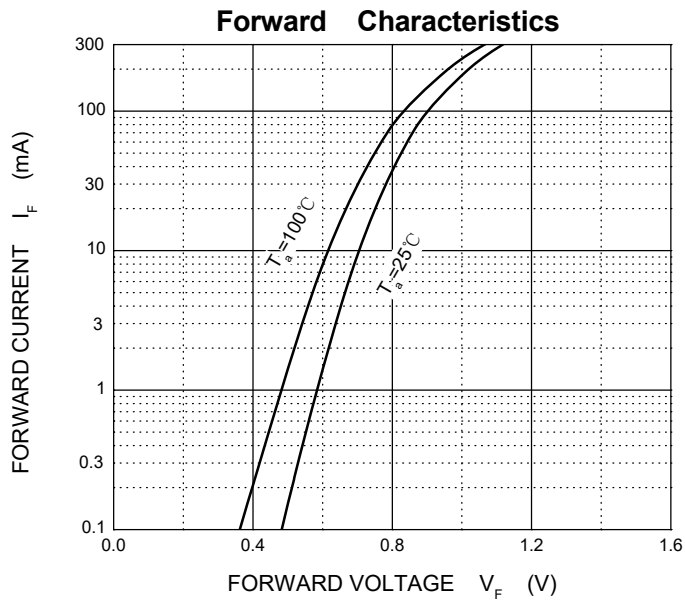
Note 1: Device mounted on 1"x1" FR4 PCB, 1oz single-side copper.

ELECTRICAL CHARACTERISTICS (Ta=25 unless otherwise specified)

| Parameter | Symbol | Min | Typ | Max | Unit | Conditions |
|-------------------------------|----------|-----|-----|-------|------|---|
| Forward voltage | V_{F1} | | | 0.715 | V | $I_F=1$ mA |
| | V_{F2} | | | 0.855 | V | $I_F=10$ mA |
| | V_{F3} | | | 1.0 | V | $I_F=50$ mA |
| | V_{F4} | | | 1.25 | V | $I_F=150$ mA |
| Reverse current | I_{R1} | | | 1 | μA | $V_R=75$ V |
| | I_{R2} | | | 25 | nA | $V_R=20$ V |
| Capacitance between terminals | C_T | | | 2 | pF | $V_R=0$ V, f=1MHz |
| Reverse recovery time | t_{rr} | | | 4 | ns | $I_F=I_R=10$ mA $I_{rr}=0.1I_R, R_L=100\Omega$ |

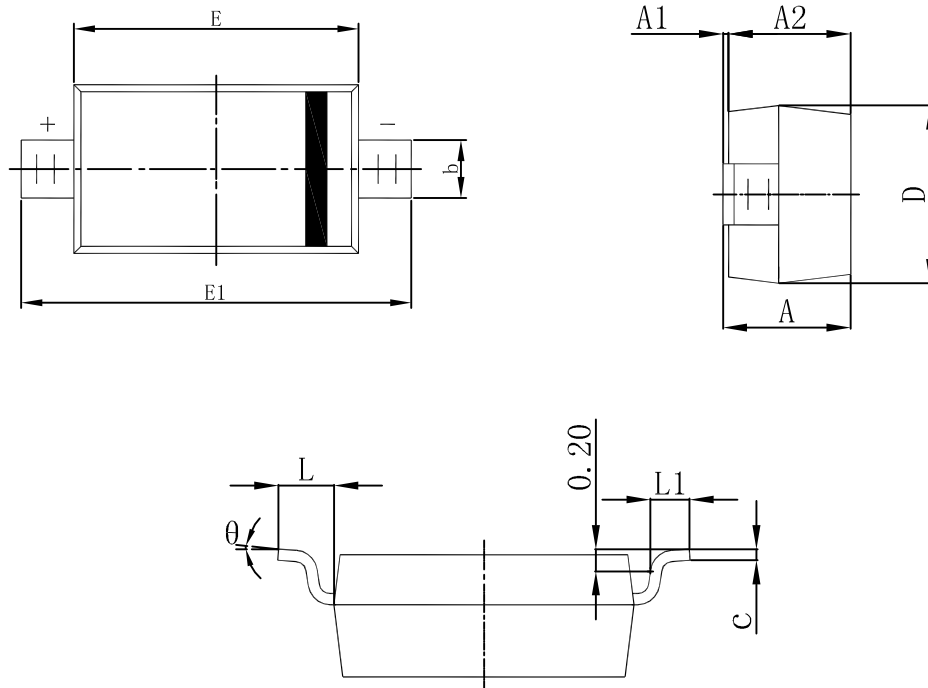


Typical Characteristics





SOD-123 Package Outline Dimensions



| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|--------|---------------------------|-------|----------------------|-------|
| | Min | Max | Min | Max |
| A | 1.050 | 1.250 | 0.041 | 0.049 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 1.050 | 1.150 | 0.041 | 0.045 |
| b | 0.450 | 0.650 | 0.018 | 0.026 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 1.500 | 1.700 | 0.059 | 0.067 |
| E | 2.600 | 2.800 | 0.102 | 0.110 |
| E1 | 3.550 | 3.850 | 0.140 | 0.152 |
| L | 0.500 REF | | 0.020 REF | |
| L1 | 0.250 | 0.450 | 0.010 | 0.018 |
| θ | 0° | 8° | 0° | 8° |



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