

Features

- Halogen Free. "Green" Device (Note 1)
- · AEC-Q101 Qualified
- · High Conductance
- · Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- · Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 357°C/W Junction to Ambient (Note 2)

| MCC Part Number | Repetitive Peak Reverse Voltage V _{RRM} | RMS Reverse Voltage V _{R(RMS)} | DC Blocking Voltage V _R |
|--------------------|---|--|--|
| BAS16WHE3 | 75V | . 53V | 75V |

Electrical Characteristics @ 25°C Unless Otherwise Specifie

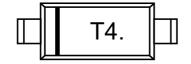
| Parameter | Symbol | Value |
|-----------------------------------|--------------------|-------|
| Average Rectified Current | I _{F(AV)} | 100mA |
| Peak Forward Surge Current (t=1s) | | 2A |
| (t=10µs) | ^I FSM | 1A |
| Power Dissipation | P_{D} | 350mW |

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

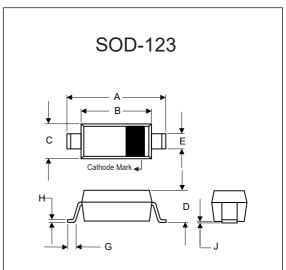
2. Valid Provided that Terminals are Kept at Ambient Temperature.

Internal Structure and Marking Code



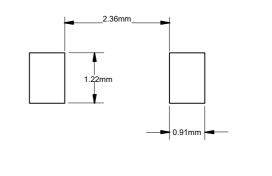


350mW High Speed Switching Diode



| DIMENSIONS | | | | | |
|------------|-------|-------|------|------|-------|
| DIM INC | | HES N | | M | NOTE |
| DIIVI | MIN | MAX | MIN | MAX | INOTE |
| Α | 0.140 | 0.152 | 3.55 | 3.85 | |
| В | 0.100 | 0.112 | 2.55 | 2.85 | |
| С | 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 | | |
| Н | | 0.010 | | 0.25 | |
| J | | 0.006 | | 0.15 | |

Suggested Solder Pad Layout





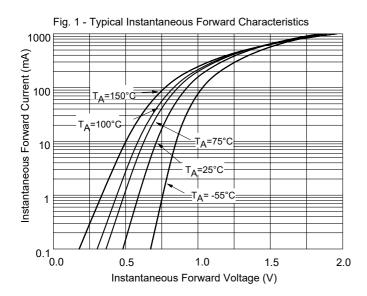
Electrical Characteristics @ 25°C (Unless Otherwise Specified)

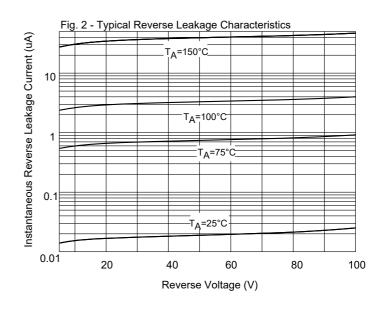
| Parameter | Symbol | Conditions | Min. | Тур. | Max. | Units |
|---------------------------|-----------------|---|------|------|-------|-------|
| Reverse Breakdown Voltage | V _{BR} | I _R =100μA | 75 | | | V |
| Forward Voltage | V _F | I _F =1mA | | | 0.715 | V |
| | | I _F =10mA | | | 0.855 | V |
| | | I _F =50mA | | | 1 | V |
| | | I _F =150mA | | | 1.25 | V |
| Reverse Current | I _R | V _R =75V | | | 1 | μA |
| | | V _R =75V, T _J =150°C | | | 50 | μA |
| Junction Capacitance | CJ | $V_R = 0V$, $f = 1MHz$ | | | 2 | pF |
| Reverse Recovery Time | t _{rr} | $I_F=I_R=10$ mA, $I_{rr}=0.1\times I_R, R_L=100\Omega$ | | | 6 | ns |

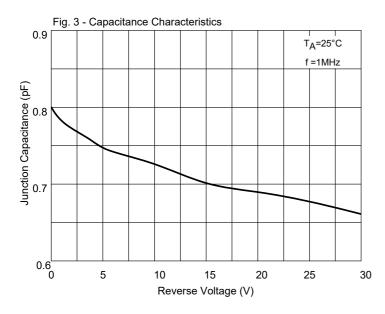
^{*} Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%

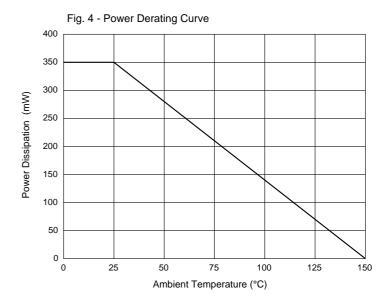


Curve Characteristics











Ordering Information

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

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