

Features

- · 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
- 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 +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 357°C/W Junction to Ambient

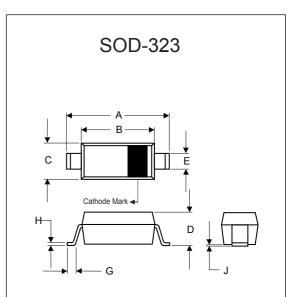
| MCC Part Number | Device Marking | | |
|--------------------|----------------|--|--|
| BAS16WXH | T4 | | |

| Parameter | Symbol | Value | |
|-------------------------------------|--------------------|-------|--|
| Non-Repetitive Peak Reverse Voltage | V_{RM} | 100V | |
| DC Reverse Voltage | V_R | 100V | |
| Peak Repetitive Reverse Voltage | V_{RRM} | 100V | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 70V | |
| Forward Continuous Current (Note 2) | I _{FM} | 200mA | |
| Average Rectified Current | I _{F(AV)} | 100mA | |
| Peak Forward Surge Current (t=1s) | _ | 2A | |
| (t=10µs) | I _{FSM} | 1A | |
| Power Dissipation (Note 2) | 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.

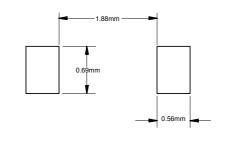
Notes: 2. Valid Provided that Terminals are Kept at Ambient Temperature.

350mW High Speed Switching Diode



| | DIMENSIONS | | | | |
|------------|------------|-------|------|------|------|
| DIM INCHES | | MM | | NOTE | |
| Dilvi | MIN | MAX | MIN | MAX | NOIL |
| Α | 0.090 | 0.107 | 2.30 | 2.70 | |
| В | 0.063 | 0.071 | 1.60 | 1.80 | |
| С | 0.045 | 0.053 | 1.15 | 1.35 | |
| D | 0.031 | 0.045 | 0.80 | 1.15 | |
| E | 0.010 | 0.016 | 0.25 | 0.40 | |
| G | 0.004 | 0.018 | 0.10 | 0.45 | |
| Н | 0.004 | 0.010 | 0.10 | 0.25 | |
| J | | 0.006 | | 0.15 | |

Suggested Solder Pad Layout





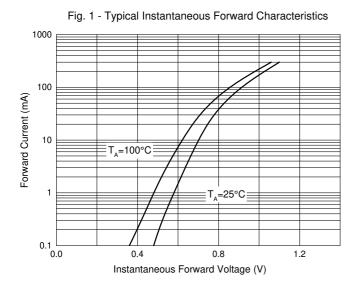
Electrical Characteristics @ 25°C (Unless Otherwise Specified)

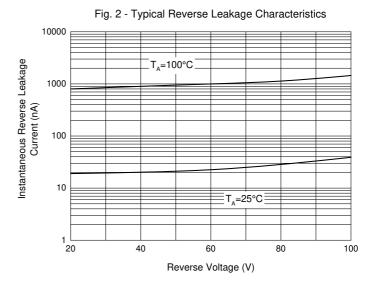
| Parameter | Symbol | Conditions | Min. | Тур. | Max. | Units |
|-----------------------|--------------------------------|---|------|------|-------|-------|
| E | Forward Voltage V _F | I _F =1mA | | | 0.715 | V |
| | | I _F =10mA | | | 0.855 | V |
| Forward Voltage | | I _F =50mA | | | 1 | V |
| | | I _F =150mA | | | 1.25 | V |
| Daviana Comment | V _R =75V | | | 1 | μA | |
| Reverse Current | ent I _R | V _R =75V, T _J =150°C | | | 20 | μA |
| Junction Capacitance | CJ | $V_R = 0V$, $f = 1MHz$ | | | 2 | pF |
| Reverse Recovery Time | t _{rr} | $I_F = I_R = 10 \text{mA},$ $I_m = 0.1 \times I_R, R_L = 100 \Omega$ | | | 6 | ns |

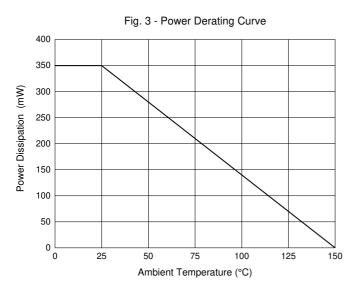
^{*} Pulse Test: Pulse Width 300 µsec, Duty Cycle 2%



Curve Characteristics









Ordering Information

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

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