

Features

- Surface Mount Package Ideally Suited for Automatic Insertion
- PN Junction Guard Ring for Transient and ESD Protection
- Low Turn-on Voltage
- Fast Switching
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 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: 500°C/W Junction to Ambient

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| BAS70X | K73 | 70V | 49V | 70V |

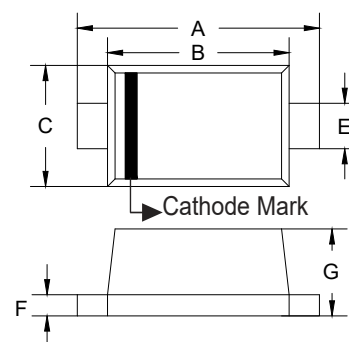
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-----------|-----------------|---|
| Average Forward Current | I_F | 70mA | |
| Repetitive Peak Forward Current | I_{FRM} | 70mA | $t_p \leq 1s$; Duty Cycle $\leq 50\%$ |
| Peak Forward Surge Current | I_{FSM} | 100mA | $t = 8.3ms$ |
| Power Dissipation | P_d | 200mW | |
| Maximum Forward Voltage | V_F | 410mV 1000mV | $t_p < 300\mu s, I_F = 1.0mA$ $t_p < 300\mu s, I_F = 15mA$ |
| DC Reverse Current At Rated DC Blocking Voltage | I_R | 100nA(Max) | $t_p < 300\mu s, V_R = 50V$ |
| Maximum Junction Capacitance | C_j | 2.0pF | Measured at 1.0MHz, $V_R = 0.0V$ |
| Maximum Reverse Recovery Time | T_{rr} | 5.0ns | $I_F = I_R = 10mA$ $I_R = 1.0mA, R_L = 100\Omega$ |

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

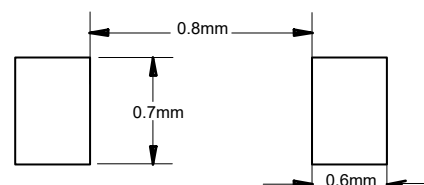
200mW, 70Volt Schottky Barrier Diode

SOD-523



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 0.059 | 0.067 | 1.50 | 1.70 | |
| B | 0.043 | 0.051 | 1.10 | 1.30 | |
| C | 0.030 | 0.033 | 0.75 | 0.85 | |
| E | 0.010 | 0.014 | 0.25 | 0.35 | |
| F | 0.003 | 0.008 | 0.08 | 0.20 | |
| G | 0.020 | 0.026 | 0.50 | 0.65 | |

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

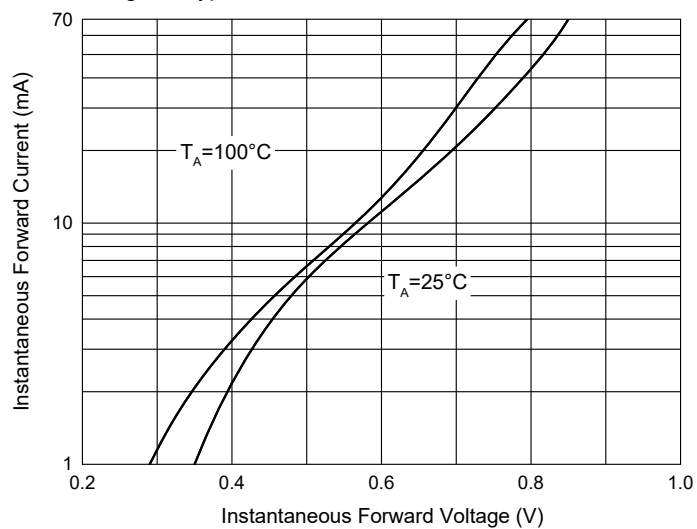


Fig. 2 - Typical Reverse Leakage Characteristics

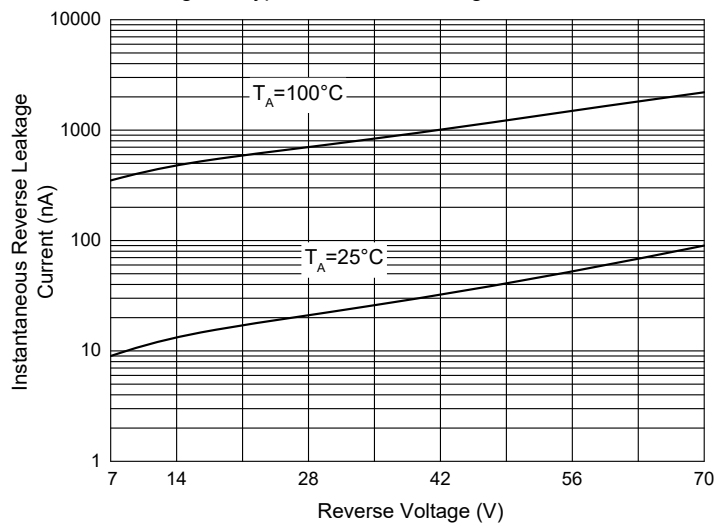
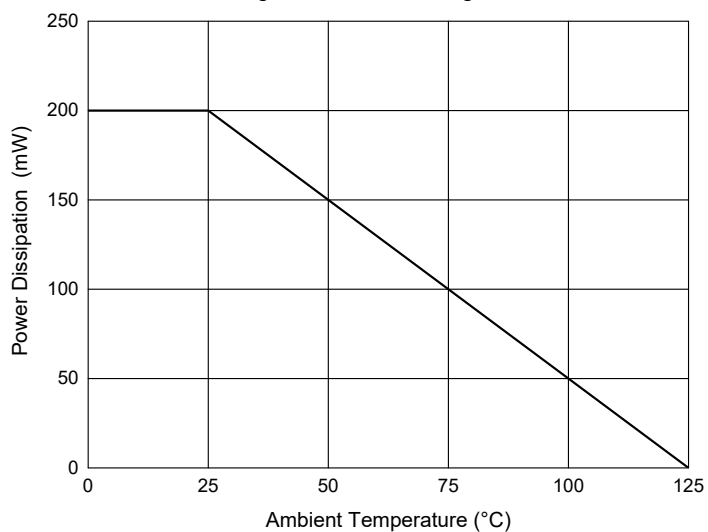


Fig. 3 - Power Derating Curve



Ordering Information

| Device | Packing |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 8Kpcs/Reel |

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