

Features

- Halogen Free Available Upon Request by Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Low Forward Voltage Drop and High Current Capability
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 10°C/W Junction to Lead

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| S3AB | S3AB | 50V | 35V | 50V |
| S3BB | S3BB | 100V | 70V | 100V |
| S3DB | S3DB | 200V | 140V | 200V |
| S3GB | S3GB | 400V | 280V | 400V |
| S3JB | S3JB | 600V | 420V | 600V |
| S3KB | S3KB | 800V | 560V | 800V |
| S3MB | S3MB | 1000V | 700V | 1000V |

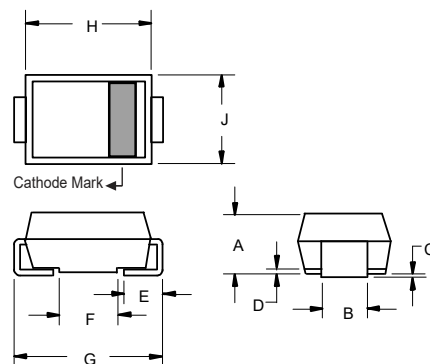
Electrical Characteristics @ 25°C Unless Otherwise Specified

| Parameter | Symbol | Value | Conditions |
|---|-----------|---------------|---|
| Average Forward Current | I_O | 3.0A | $T_T=75^\circ\text{C}$ |
| Non-Repetitive Peak Forward Surge Current | I_{FSM} | 100A 200A | 8.3ms, Half Sine Wave 1ms, Square Wave |
| Repetitive Peak Forward Surge Current | I_{FRM} | 150A | 300us Surge Duration 900 ms Between Surges |
| Maximum Instantaneous Forward Voltage | V_F | 1.15V | $I_{FM}=3.0A$; $T_J=25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 10μA 250μA | $T_J=25^\circ\text{C}$; $T_J=125^\circ\text{C}$ |
| Typical Junction Capacitance | C_J | 40pF | Measured at 1.0MHz $V_R=4.0V$ |

Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

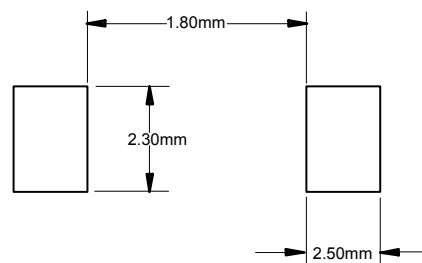
**3 Amp Glass Passivated Rectifier
50 to 1000 Volts**

SMB (DO-214AA)



| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|------|------|------|
| | MIN | MAX | MIN | MAX | |
| A | 0.079 | 0.103 | 2.00 | 2.62 | |
| B | 0.075 | 0.087 | 1.91 | 2.21 | |
| C | 0.002 | 0.008 | 0.05 | 0.20 | |
| D | 0.006 | 0.012 | 0.15 | 0.31 | |
| E | 0.030 | 0.060 | 0.76 | 1.52 | |
| F | 0.065 | 0.091 | 1.65 | 2.32 | |
| G | 0.200 | 0.220 | 5.08 | 5.59 | |
| H | 0.160 | 0.191 | 4.06 | 4.85 | |
| J | 0.130 | 0.155 | 3.30 | 3.94 | |

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

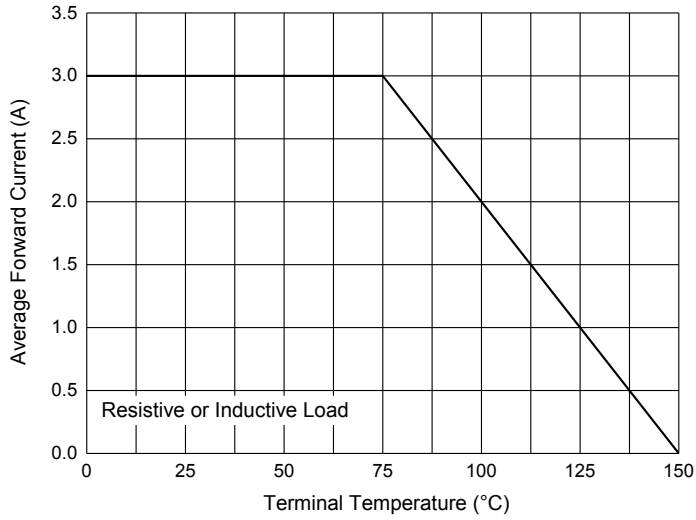


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

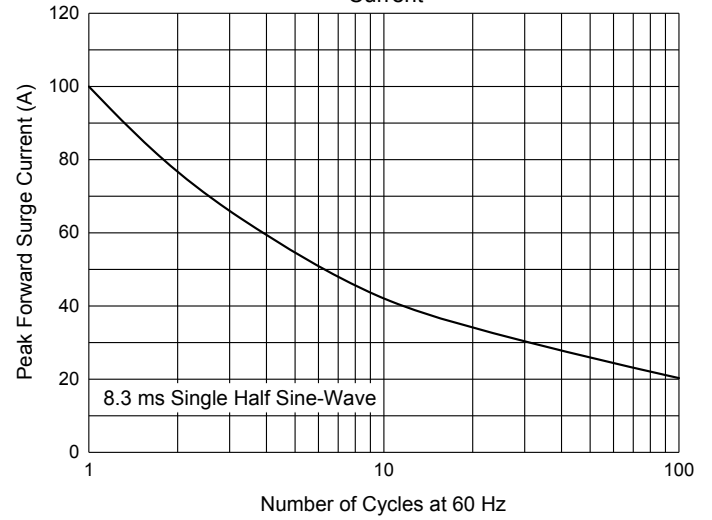


Fig. 3 - Typical Instantaneous Forward Characteristics

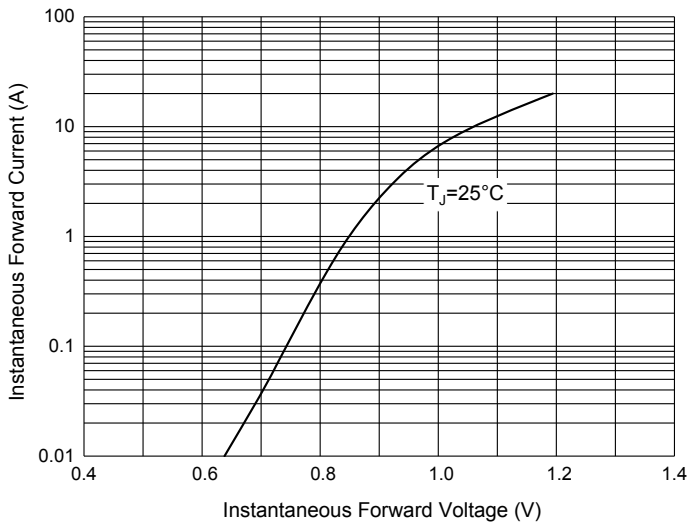
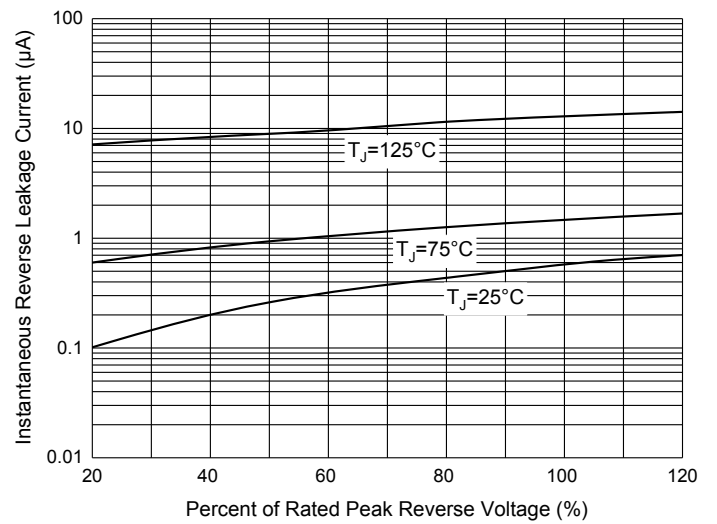


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

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

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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