



Micro Commercial Components



Micro Commercial Components  
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**S1Q  
THRU  
S1ZZ**

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- For Surface Mount Applications
- Extremely Low Thermal Resistance
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Perfect For Ballast, Television And Monitor Applications

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 15°C/W Junction To Lead

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| S1Q             | S1Q            | 1200V                                  | 840V                | 1200V                       |
| S1V             | S1V            | 1400V                                  | 980V                | 1400V                       |
| S1Y             | S1Y            | 1600V                                  | 1120V               | 1600V                       |
| S1Z             | S1Z            | 1800V                                  | 1260V               | 1800V                       |
| S1ZZ            | S1ZZ           | 2000V                                  | 1400V               | 2000V                       |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

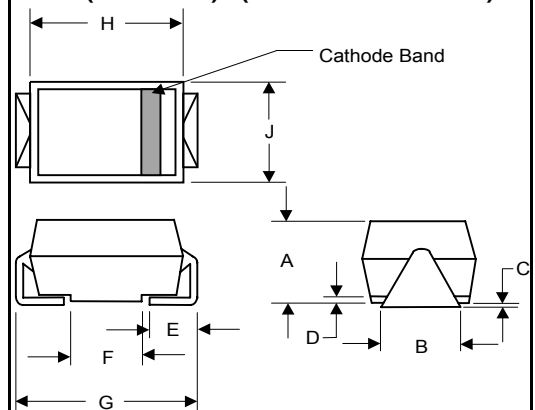
|   |             |                 |   |
|---|-------------|-----------------|---|
| Average Forward Current                                 | $I_{F(AV)}$ | 1.0A            | $T_J = 75^\circ\text{C}$                              |
| Peak Forward Surge Current                              | $I_{FSM}$   | 30A             | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 1.10V           | $I_{FM} = 1.0A;$<br>$T_J = 25^\circ\text{C}^*$        |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 10.0µA<br>500µA | $T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$ |
| Maximum Reverse Recovery Time                           | $T_{rr}$    | 2.5us           | $I_F=0.5A, I_R=1.0A,$<br>$I_{rr}=0.25A$               |
| Typical Junction Capacitance                            | $C_J$       | 15pF            | Measured at<br>1.0MHz, $V_R=4.0V$                     |

\*Pulse test: Pulse width 300 µsec, Duty cycle 2%

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

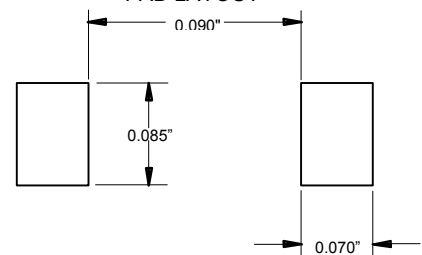
**1 Amp  
Silicon Rectifier  
1200 to 2000 Volts**

## DO-214AA (SMBJ) (Round Lead)



| DIM | DIMENSIONS |      |      |      | NOTE |
|-----|------------|------|------|------|------|
|     | INCHES     |      | MM   |      |      |
| A   | .078       | .116 | 1.98 | 2.95 |      |
| B   | .075       | .089 | 1.90 | 2.25 |      |
| C   | .002       | .008 | .05  | .20  |      |
| D   | ---        | .02  | ---  | .51  |      |
| E   | .035       | .055 | .90  | 1.40 |      |
| F   | .065       | .091 | 1.65 | 2.32 |      |
| G   | .205       | .224 | 5.21 | 5.69 |      |
| H   | .160       | .180 | 4.06 | 4.57 |      |
| J   | .130       | .155 | 3.30 | 3.94 |      |

### SUGGESTED SOLDER PAD LAYOUT





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Ordering Information :

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

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