



## Solid State Devices, Inc.

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### Designer's Data Sheet

#### Part Number/Ordering Information <sup>1/</sup>

SDA304

**Screening <sup>2/</sup>**         = Not Screened  
                          TX = TX Level  
                          TXV = TXV

#### Peak Inverse Voltage

A = 50V, B = 100V, C = 200V, D = 400V  
 E = 600V, F = 800V, and G = 1,000V.

## SDA304A thru SDA304G

**10 AMP**  
**50 to 1,000 VOLT**  
**STANDARD RECOVERY**  
**SINGLE PHASE BRIDGE**

#### FEATURES:

- PIV 50 to 1,000 Volts
- Average Output 10A
- Reverse Recovery 5μsec Max
- Avalanche Breakdown
- Small Size
- Hermetically Sealed Rectifier
- Easy PC Mounting
- Maximum Thermal Resistance 5.0°C/W
- -55 to +150°C Operating and Storage Temperature
- Also Available in Fast, Ultra Fast, and Hyper Fast Versions – Contact Factory
- TX and TXV Screening Available

### ELECTRICAL CHARACTERISTICS<sup>3/</sup>

| Part Number | Peak Inverse Voltage (per leg) | Average Rectified Current | Maximum Surge Current (1 Cycle) | Maximum Forward Voltage (per leg)        | Maximum Reverse Current (@ PIV) |       |
|-------------|--------------------------------|---------------------------|---------------------------------|------------------------------------------|---------------------------------|-------|
| Symbol      | PIV                            | I <sub>O</sub>            | I <sub>FSM</sub>                | V <sub>F</sub> <sup>4/</sup>             | I <sub>R</sub>                  |       |
| Units       | Volts                          | Amps                      | Amps                            | Volts                                    | μA                              |       |
| Conditions  | 25°C                           | 85°C                      | 25°C                            | I <sub>F</sub> =9A, T <sub>A</sub> =25°C | 25°C                            | 100°C |
| SDA304A     | 50                             | 10                        | 75                              | 1.15                                     | 5                               | 100   |
| SDA304B     | 100                            | 10                        | 75                              | 1.15                                     | 5                               | 100   |
| SDA304C     | 200                            | 10                        | 75                              | 1.15                                     | 5                               | 100   |
| SDA304D     | 400                            | 10                        | 75                              | 1.15                                     | 5                               | 100   |
| SDA304E     | 600                            | 10                        | 75                              | 1.15                                     | 5                               | 100   |
| SDA304F     | 800                            | 10                        | 75                              | 1.15                                     | 5                               | 100   |
| SDA304G     | 1000                           | 10                        | 75                              | 1.15                                     | 5                               | 100   |

#### NOTES:

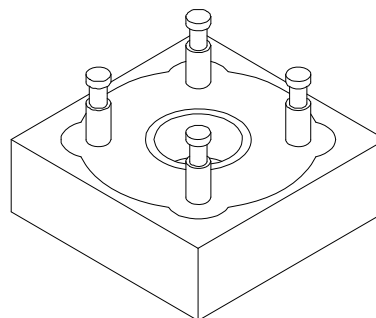
1/ For Ordering Information, Price, Operating Curves and Availability-Contact Factory.

2/ Screening based on MIL-PRF-19500. Screening flows available on request.

3/ Unless Otherwise Specified, All Electrical Characteristics @25°C.

4/ Maximum forward voltage measured with instantaneous forward pulse of 300μsec minimum.

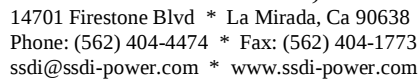
SDA304 Package



**NOTE:** All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

**DATA SHEET #: RA0011B**

**DOC**



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