



# Solid State Devices, Inc.

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## SDA403AF thru SDA403GF

**5 AMPS 50 – 1000 VOLTS**  
**FAST RECOVERY**  
**THREE PHASE BRIDGE RECTIFIER**

### Designer's Data Sheet

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

**SDA403**    \_ \_ \_

**L Screening<sup>2/</sup>**  
\_ = Not Screened  
TX = TX Level  
TXV = TXV  
S = S Level

**Reverse Recovery**  
F = Fast

**Peak Inverse Voltage (per leg)**  
A = 50V, B = 100V, C = 200V,  
D = 400V, E = 600V, F = 800V,  
G = 1,000V.

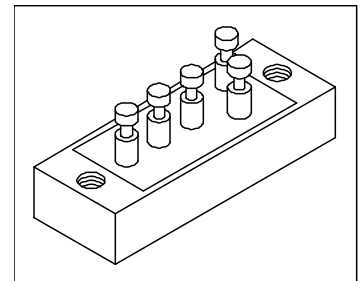
#### FEATURES:

- Fast Reverse Recovery Time 150 ns Max
- Average Output Current 5 Amps @ 50°C
- PIV 50 to 1000 Volts Per Leg
- Efficient Thermal Design
- Double Plug, Void Free, Hermetically Sealed, Glass Passivated Diode Cells
- Case Electrically Insulated
- Machined Aluminum Case
- Available in Ultra Fast and Hyper Fast Versions
- Available in Higher Voltages
- TX, TXV, and S-Level Screening Available

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

Part Number	Peak Inverse Voltage (per leg)	Sine Wave RMS Input Voltage Max.	Reverse <sup>4/</sup> Recovery Time	Average DC Output Current T <sub>c</sub> =Case Temp		Average DC Output Current T <sub>A</sub> = Ambient Temp (no heat sink)		Peak Forward Surge Current (1 Cycle)	Peak Repetitive Forward Current	Maximum Forward Voltage (per leg) @ 3 ADC	Maximum Reverse Current (per leg) @ PIV	
				I <sub>F(AV)</sub>	I <sub>F(AV)</sub>	I <sub>F(AV)</sub>	I <sub>F(AV)</sub>				I <sub>R</sub>	I <sub>R</sub>
Symbol	PIV	V <sub>r</sub>	T <sub>rr</sub>	I <sub>F(AV)</sub>		I <sub>F(AV)</sub>		I <sub>FSM</sub>	I <sub>FRM</sub>	V <sub>F</sub>	I <sub>R</sub>	
Units	Volts	Volts	ns	Amps		Amps		Amps	Amps	Volts	μA	
Conditions			Max	50°C	100°C	25°C	55°C				25°C	100°C
SDA403AF	50	35	150	5.0	2.5	1.5	1.0	25	9.0	1.4	3	75
SDA403BF	100	70	150	5.0	2.5	1.5	1.0	25	9.0	1.4	3	75
SDA403CF	200	140	150	5.0	2.5	1.5	1.0	25	9.0	1.4	3	75
SDA403DF	400	280	150	5.0	2.5	1.5	1.0	25	9.0	1.4	3	75
SDA403EF	600	420	150	5.0	2.5	1.5	1.0	25	9.0	1.4	3	75
SDA403FF	800	560	150	5.0	2.5	1.5	1.0	25	9.0	1.4	3	75
SDA403GF	1000	700	150	5.0	2.5	1.5	1.0	25	9.0	1.4	3	75

SDA403 Package:



#### NOTES:

1. For Ordering Information, Price, Outline, Curves, and Availability- Contact Factory.
2. Screened to MIL-PRF-19500.
3. Unless Otherwise Specified, All Electrical Characteristics @25°C.
4. Recovery Conditions: I<sub>F</sub> = 0.5 Amp, I<sub>R</sub> = 1.0 Amp rec. to .25 Amp.

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

**DATA SHEET #: RA0082A**

**DOC**