



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^{1/}

SDA403 _ _ _

L Screening^{2/}

___ = 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.

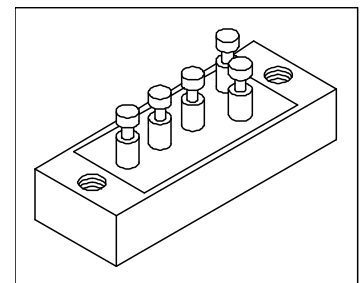
FEATURES:

- 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^{3/}

| Part Number | Peak Inverse Voltage (per leg) | Sine Wave RMS Input Voltage Max. | Reverse ^{4/} Recovery Time | Average DC Output Current T _c =Case Temp | | Average DC Output Current T _A = 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 _{F(AV)} | I _{F(AV)} | I _{F(AV)} | I _{F(AV)} | | | | I _R | I _R |
| Symbol | PIV | V _r | T _{rr} | I _{F(AV)} | | I _{F(AV)} | | I _{FSM} | I _{FRM} | V _F | I _R | |
| 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_F = 0.5 Amp, I_R = 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

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