



**Solid State Devices, Inc.**

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**SDA41AUF thru SDA41GUF  
 14.5A Rectifier Assembly**

**14.5 AMPS  
 50 – 600 VOLTS  
 ULTRA FAST RECOVERY  
 SINGLE PHASE BRIDGE RECTIFIER**

**Designer's Data Sheet**

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

SDA41

UF

**Screening <sup>2/</sup>**

- = Not Screened
- TX = TX Level
- TXV = TXV
- S = S Level

**Reverse Recovery Time**

UF = Ultra Fast Recovery

**Voltage/Family**

- A = 50V
- B = 100V
- C = 200V
- D = 300V
- E = 400V
- F = 500V
- G = 600V

**FEATURES:**

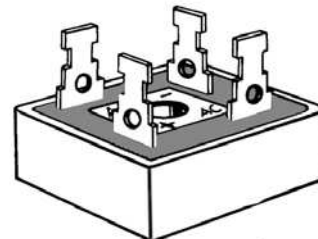
- Ultra Fast Reverse Recovery Time 70 ns Max
- Average Output Current 14.5 Amps @ 50°C
- PIV 50 to 600 Volts Per Leg
- Thermal Resistance Junction to Case 1.5°C/W Max
- All Welded Interconnects
- Hermetically Sealed
- Universal 3 Way Terminals
- Aluminum Case
- Available in Higher Voltages
- Hyper Fast and Standard Recovery Versions Available – Contact Factory
- TX, TXV, and S-Level Screening Available<sup>2/</sup>

**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
SDA41AUF	50	35	70	14.5	10.5	5	4	75	25	1.35	20	500
SDA41BUF	100	70	70	14.5	10.5	5	4	75	25	1.35	20	500
SDA41CUF	200	140	70	14.5	10.5	5	4	75	25	1.35	20	500
SDA41DUF	300	210	70	14.5	10.5	5	4	75	25	1.35	20	500
SDA41EUF	400	280	70	14.5	10.5	5	4	75	25	1.35	20	500
SDA41FUF	500	350	70	14.5	10.5	5	4	75	25	1.35	20	500
SDA41GUF	600	420	70	14.5	10.5	5	4	75	25	1.35	20	500

**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. 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 #: RA0058A**

**DOC**



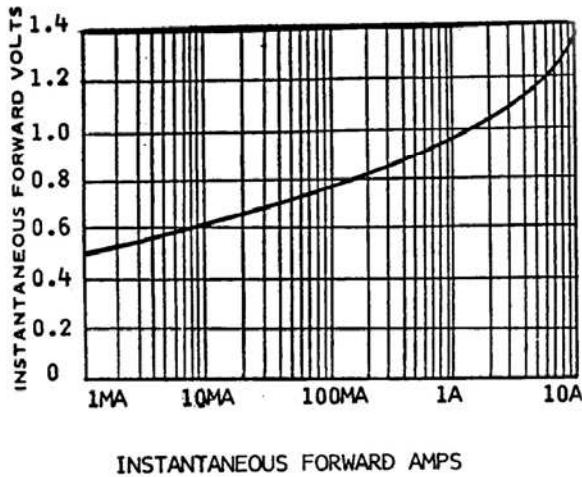
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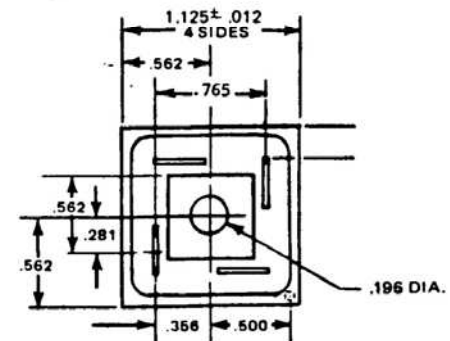
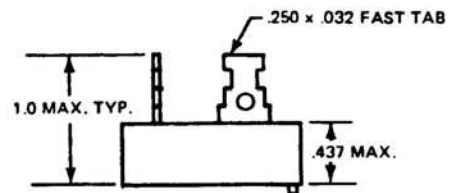
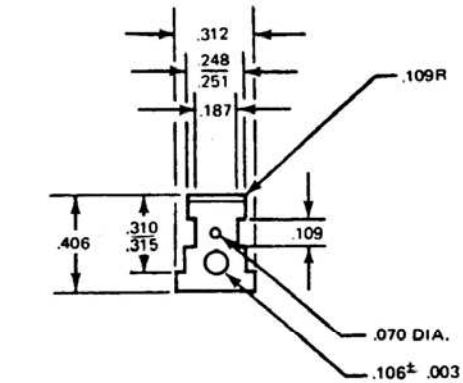
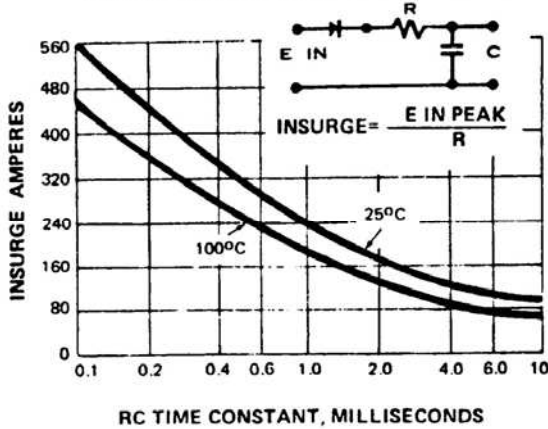
SDA41AUF thru SDA41GUF

SDA41AUF through SDA41GUF:

TYPICAL DYNAMIC FORWARD CHARACTERISTICS

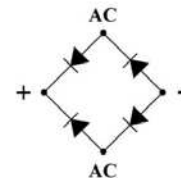


MAXIMUM RATINGS FOR CAPACITY LOADS



TOLERANCE XX ± .03  
XXX ± .020  
FRACTIONAL = NOMINAL DIMENSION

SINGLE PHASE BRIDGE RECTIFIER



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