



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
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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 ^{1/}

SDA41 **UF**

Screening ^{2/}
 — = Not Screened
 TX = TX Level
 TXV = TXV
 S = S Level

Reverse Recovery Time
 UF = Ultra Fast Recovery

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

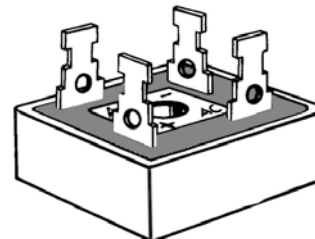
- FEATURES:**
- Ultra Fast Reverse Recovery Time 70 ns Max
 - Average Output Current 14.5 Amps @ 50°C
 - PIV 50 to 600 Volts Per Leg
 - Thermal Resistance Junction to Case 1.5°C/W Max
 - All Welded Interconnects
 - Hermetically Sealed
 - Universal 3 Way Terminals
 - Aluminum Case
 - Available in Higher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

ELECTRICAL CHARACTERISTICS³

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
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_F = 0.5 Amp, I_R = 1.0 Amp rec. to .25 Amp.





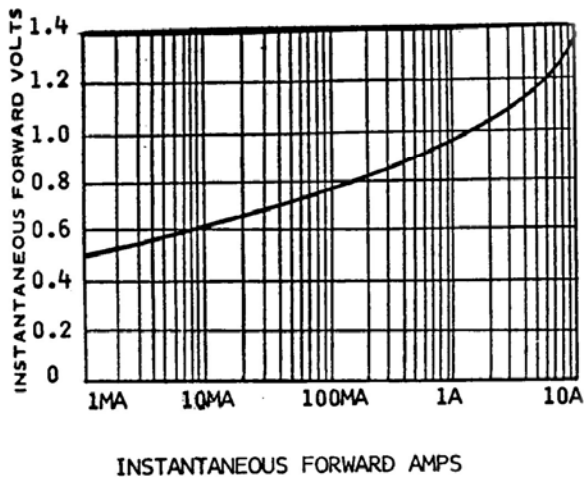
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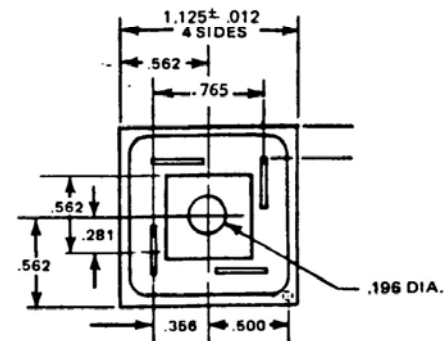
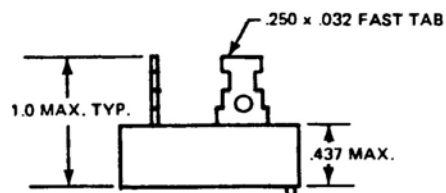
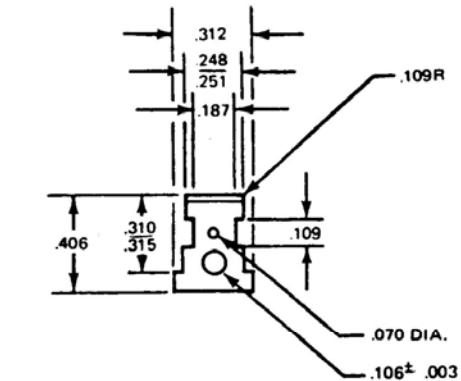
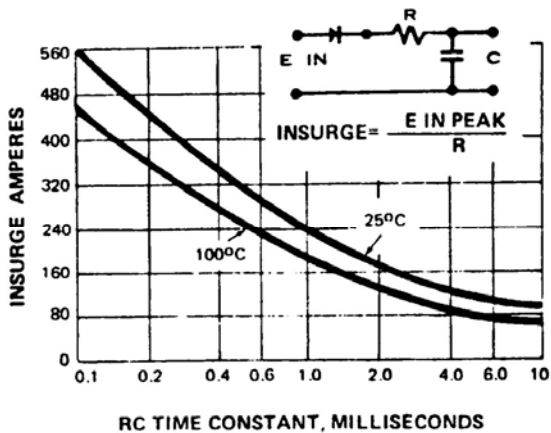
SDA41AUF thru SDA41GUF

SDA41AUF through SDA41GUF:

TYPICAL DYNAMIC FORWARD CHARACTERISTICS

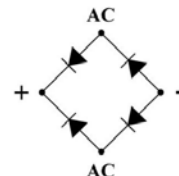


MAXIMUM RATINGS FOR CAPACITY LOADS



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

SINGLE PHASE BRIDGE RECTIFIER



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

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