Solid State Devices, Inc.
14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

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:

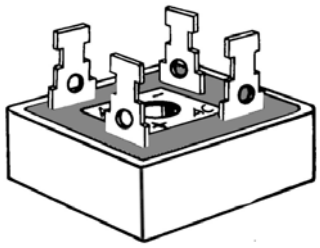
- **Ultra Fast Reverse Recovery Time 70 ns Max**
- **Average Output Current 14.5 Amps @ 50°C**
- **PIV 50 to 600 Volts Per Leg**
- **Thermal Resistance Junction to Case 1.5°C/W Max**
- **All Welded Interconnects**
- **Hermetically Sealed**
- **Universal 3 Way Terminals**
- **Aluminum Case**
- **Available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

ELECTRICAL 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	
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 @25ºC.
4. Recovery Conditions: I_F = 0.5 Amp, I_R = 1.0 Amp rec. to .25 Amp.

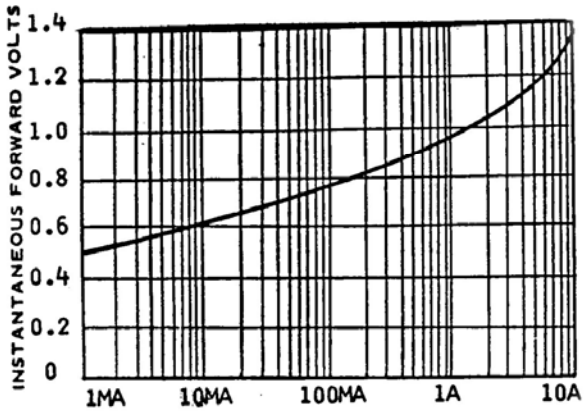


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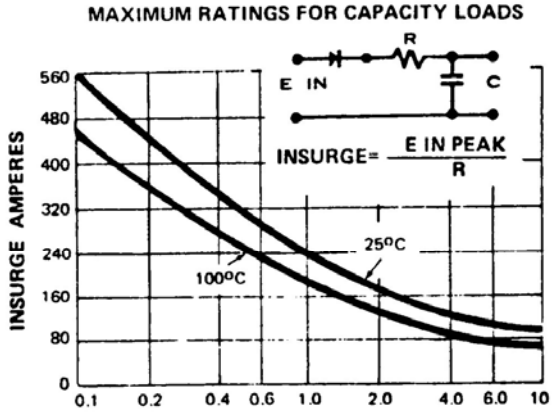
SDA41AUF thru SDA41GUF

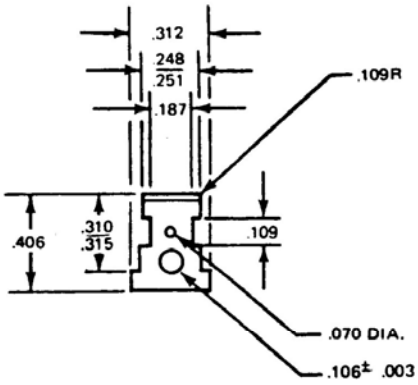
SDA41AUF through SDA41GUF:

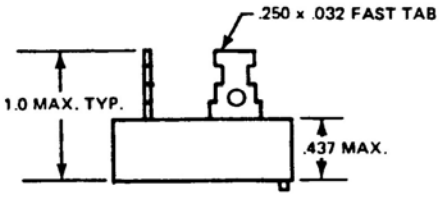
TYPICAL DYNAMIC FORWARD CHARACTERISTICS

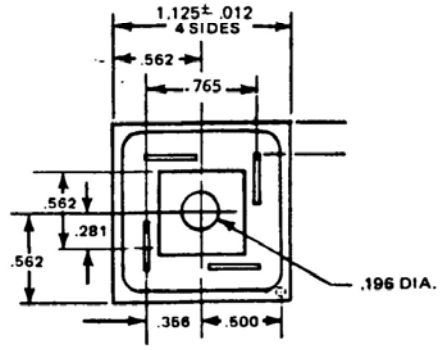


MAXIMUM RATINGS FOR CAPACITY LOADS









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

SINGLE PHASE BRIDGE RECTIFIER

