



# Solid State Devices, Inc.

14830 Valley View Blvd \* La Mirada, Ca 90638

Phone: (562) 404-7855 \* Fax: (562) 404-1773

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## SDA113 Series

### 7.5 A / 1000V THREE PHASE BRIDGE RECTIFIER ASSEMBLY

#### DESIGNER'S DATA SHEET

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

SDA113

Lead Bend <sup>3/</sup>      = Straight Leads  
                   UB = Up Bend  
                   DB = Down Bend

Terminals <sup>2/3/</sup> L = Copper Leads  
                   \_ = Turret Terminals

Voltage A = 50 V  
           B = 100 V  
           C = 200 V  
           D = 400 V  
           E = 600 V  
           F = 800 V  
           G = 1000 V

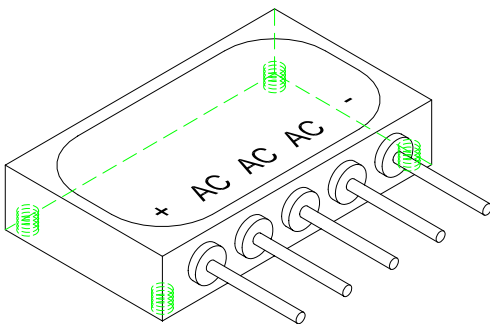
##### Features:

- Higher Blocking Voltage Available. Contact Factory.
- High Output Current 7.5 Amps
- Low Reverse Leakage Current
- Constructed with Void-free, Hermetically Sealed Discretes
- Aluminum Case for Maximum Thermal Conductivity
- Small Package Size (1.500 x 0.875 x 0.310")
- TX and TXV & S Level Screening Available
- Fast, Ultra Fast, & Hyper Fast Versions Available. Contact Factory.

#### Maximum Ratings

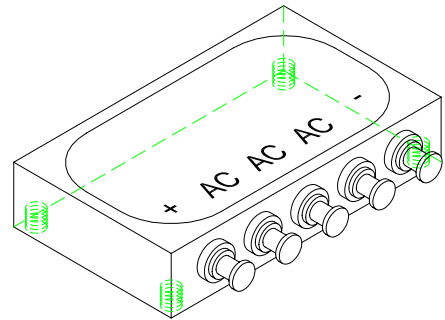
	Symbol	Value	Units
<b>Peak Repetitive and Peak Surge Reverse Voltage</b>	$V_{RRM}$ $V_{RSM}$ $V_R$	See Voltage Key	Volts
<b>Average Rectified Forward Current <sup>4/</sup></b> (Resistive Load, 60 Hz Sine Wave)	$I_o$	7.5 5.5	Amps
<b>Peak Surge Current</b> (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$ , per leg)	$I_{FSM}$	50	Amps
<b>Operating &amp; Storage Temperature</b>	$T_{op}$ & $T_{stg}$	-55 to +150	$^\circ\text{C}$
<b>Maximum Thermal Resistance, Junction to Case</b>	$R_{\theta JC}$	4.5	$^\circ\text{C/W}$

#### SDA113 (L)



Lead Dia = .050" Lead Length = 0.5" min

#### SDA113



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

DATA SHEET #: RA0047A

DOC



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## SDA113 Series

Electrical Characteristic <sup>5/</sup>		Symbol	Min	Typ	Max	Units
<b>Instantaneous Forward Voltage Drop</b> (T <sub>A</sub> = 25°C, 300 - 500 μsec pulse)	I <sub>F</sub> = 3A	V <sub>F1</sub>	—	—	1.1	Volts
<b>Reverse Leakage Current</b> (Rated V <sub>R</sub> , T <sub>A</sub> = 25°C, 300 μsec pulse minimum)		I <sub>R1</sub>	—	—	5	μA
<b>Reverse Leakage Current</b> (Rated V <sub>R</sub> , T <sub>A</sub> = 100°C, 300 μsec pulse minimum)		I <sub>R2</sub>	—	—	50	μA

### NOTES:

\* Pulse Test: Pulse Width = 300μsec, Duty Cycle = 2%

1/ For Ordering Information, Price, and Availability Contact Factory.

2/ For Package Outlines Contact Factory.

3/ Up and Down Bend Configurations are Available for ‘\_’ ( Leaded ) Packages Only.

4/ Derate Linearly at 0.28A/°C for T<sub>C</sub> > 55°C.

5/ Unless Otherwise Specified, All Electrical Characteristics @25°C.

### Mounting Diagram: <sup>2/</sup>

