



**Solid State Devices, Inc.**

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**SDA316A thru SDA316E**

**5 AMPS, 50 – 600 VOLTS  
 STANDARD RECOVERY  
 THREE PHASE BRIDGE RECTIFIER**

**Designer's Data Sheet**

**Part Number/Ordering Information <sup>1/</sup>**  
**SDA316** — —

<sup>2/</sup> Screening  
 — = Not Screened  
 TX = TX Level  
 TXV = TXV  
 S = S Level

**Peak Inverse Voltage (per leg)**  
 A = 50V, B = 100V, C = 200V,  
 D = 400V, E = 600V.

**FEATURES:**

- Average Output Current 5 Amps @ 55° C
- PIV 50 to 600 Volts Per Leg
- Efficient Thermal Design
- Insulated Electrical Connections
- Hermetically Sealed
- Aluminum Case
- Available in Fast, Ultra Fast and Hyper Fast Versions
- Available in Higher Voltages
- TX, TXV, and S-Level Screening Available

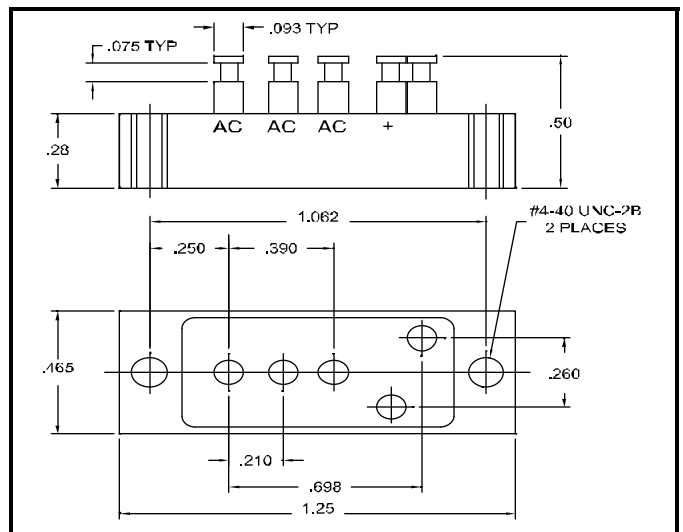
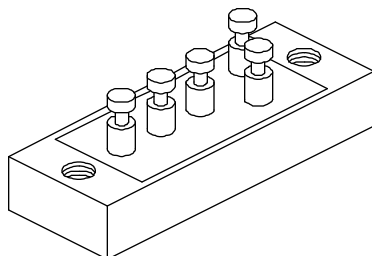
**ELECTRICAL CHARACTERISTICS <sup>3/</sup>**

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 DC Output (1 Sec. Max.)	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>FSM</sub>	I <sub>FRM</sub>	V <sub>F</sub>	I <sub>R</sub>	
Units	Volts	Volts	µs	Amps		Amps		Amps	Amps	Amps	Volts	µA	
Conditions			Max	55° C	100° C	25° C	55° C	55° C				25° C	100° C
<b>SDA316A</b>	50	35	5	5.0	3.0	2.0	1.5	10	50	15	1.2	3	75
<b>SDA316B</b>	100	70	5	5.0	3.0	2.0	1.5	10	50	15	1.2	3	75
<b>SDA316C</b>	200	140	5	5.0	3.0	2.0	1.5	10	50	15	1.2	3	75
<b>SDA316D</b>	400	280	5	5.0	3.0	2.0	1.5	10	50	15	1.2	3	75
<b>SDA316E</b>	600	420	5	5.0	3.0	2.0	1.5	10	50	15	1.2	3	75

**SDA316A thru SDA316E <sup>5/</sup>:**

**NOTES:**

- 1/** For Ordering Information, Price, and Availability- Contact Factory.
- 2/** Screened to MIL-PRF-19500.
- 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.
- 5/** For Information on Curves, Contact Factory for Assistance.



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