



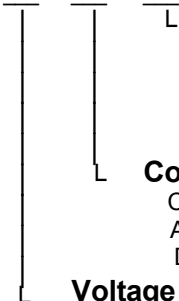
## Solid State Devices, Inc.

14701 Firestone Blvd \* La Mirada, CA 90638  
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 ssdi@ssdi-power.com \* www.ssdi-power.com

### DESIGNER'S DATA SHEET

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

SDA280



#### Screening <sup>2/</sup>

— = Not Screened  
 TX = TX Level  
 TXV = TXV  
 S = S Level

#### Configuration

C = Common Cathode  
 A = Common Anode  
 D = Doubler

#### Voltage

D = 400V  
 E = 600V  
 F = 800V  
 G = 1000V

## SDA280D THRU SDA280G

## 15 AMPS / 400 – 1000 VOLTS FAST RECOVERY CENTERTAP RECTIFIER

#### Features:

- Average Output Current: 15 Amps
- PIV: 400 to 1000V
- Max Thermal Resistance 5.0 °C/Watt
- Fast Recovery: 150 / 180 nsec
- Glass Passivated Rectifiers
- Hermetically Sealed Discretes
- Aluminum Case for Maximum Thermal Conductivity
- Common Cathode, Common Anode, and Doubler Versions Available. Contact Factory for Part Number.
- Parts with Blade and Hook Terminals Available. Contact Factory for Part Number.
- TX, TXV, and Space Level Screening Available

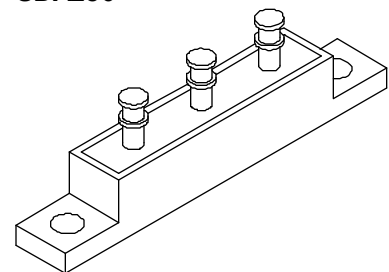
Maximum Ratings		Symbol	Value	Units
<b>Peak Repetitive and Peak Surge Reverse Voltage</b>	SDA280D SDA280E SDA280F SDA280G	$V_{RRM}$ $V_{RSM}$ $V_R$	400 600 800 1000	Volts
<b>Average Rectified Forward Current <sup>4/</sup></b> (Resistive Load, 60 hz Sine Wave, No Heatsink)	$T_A = 55^\circ\text{C}$ $T_A = 100^\circ\text{C}$	$I_o$	15 10	Amps
<b>Peak Surge Current <sup>3/</sup></b> (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$ , per leg)		$I_{FSM}$	150	Amps
<b>Operating &amp; Storage Temperature</b>		$T_{op}$ & $T_{stg}$	-55 to +150	°C
<b>Maximum Thermal Resistance</b> Junction to Case		$R_{\theta JC}$	5.0	°C/W

<sup>1/</sup> For Ordering Information, Price, Operating Curves, and Availability- Contact Factory.

<sup>2/</sup> Screening based on MIL-PRF-19500. Screening flows available on request.

<sup>3/</sup> Both legs tied together

<sup>4/</sup> Per leg



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

**DATA SHEET #: RA0050C**

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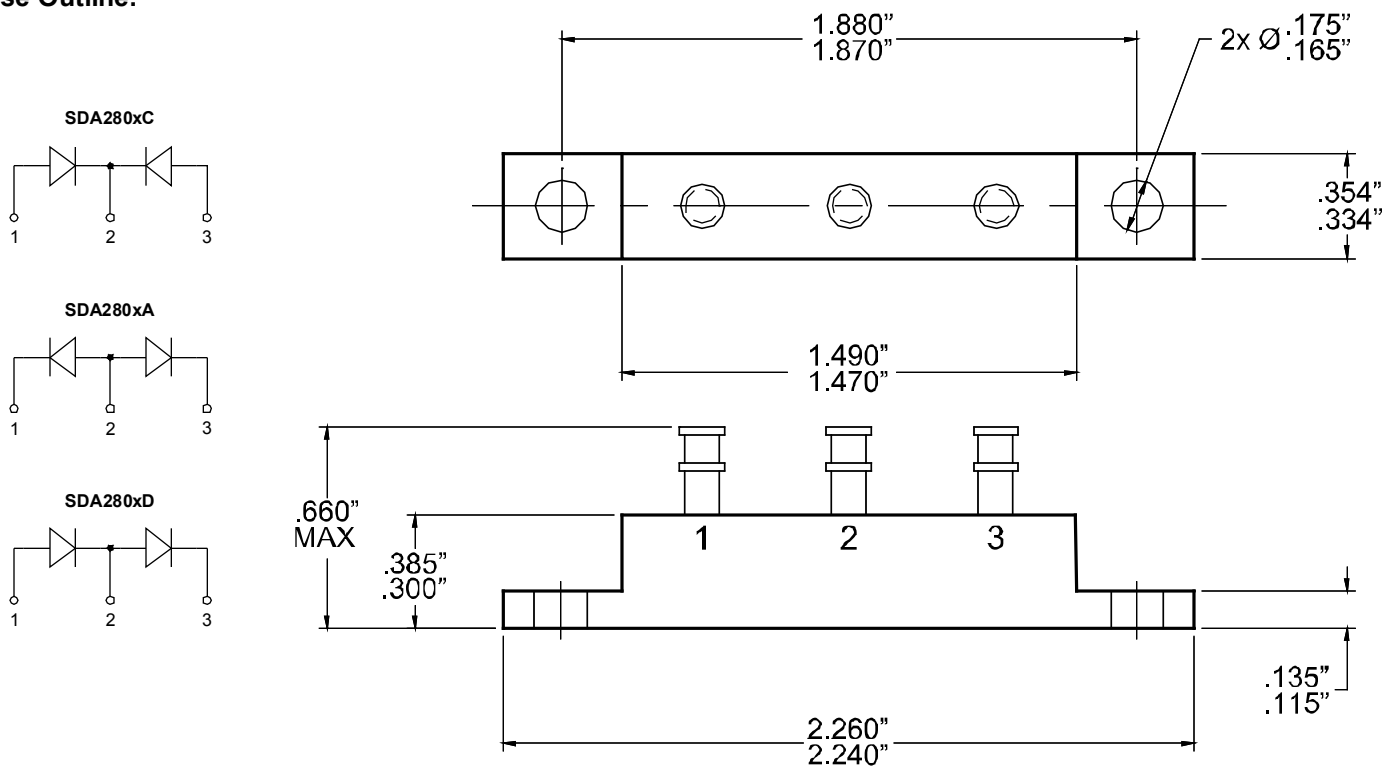
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# SDA280D thru SDA280G

Electrical Characteristics	Symbol	Value	Units
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 5A$ , $T_A = 25^\circ C$ , 300 - 500 $\mu sec$ pulse)	$V_{F1}$	1.4	$V_{DC}$
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ C$ , 300 $\mu sec$ pulse minimum)	$I_{R1}$	5	$\mu A$
<b>Reverse Recovery Time</b> ( $T_A = 25^\circ C$ , $I_F = 0.5A$ , $I_R = 1.0A$ , $I_{RR} = 0.25A$ )	$t_{RR}$	SDA280D 150 SDA280E - SDA280G 180	nsec

## Case Outline:



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