



**Solid State Devices, Inc.**

14701 Firestone Blvd \* La Mirada, CA 90638  
 Phone: (562) 404-4474 \* Fax: (562) 404-1773  
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**SDA280D  
THRU  
SDA280G**

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

**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

- 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

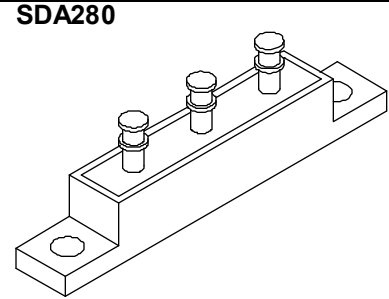
Maximum Ratings		Symbol	Value	Units
<b>Peak Repetitive and Peak Surge Reverse Voltage</b>	<b>SDA280D</b>	$V_{RRM}$ $V_{RSM}$ $V_R$	400	Volts
	<b>SDA280E</b>		600	
	<b>SDA280F</b>		800	
	<b>SDA280G</b>		1000	
<b>Average Rectified Forward Current <sup>4/</sup></b> (Resistive Load, 60 hz Sine Wave, No Heatsink)	$T_A = 55^\circ\text{C}$	$I_o$	15	Amps
	$T_A = 100^\circ\text{C}$		10	
<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





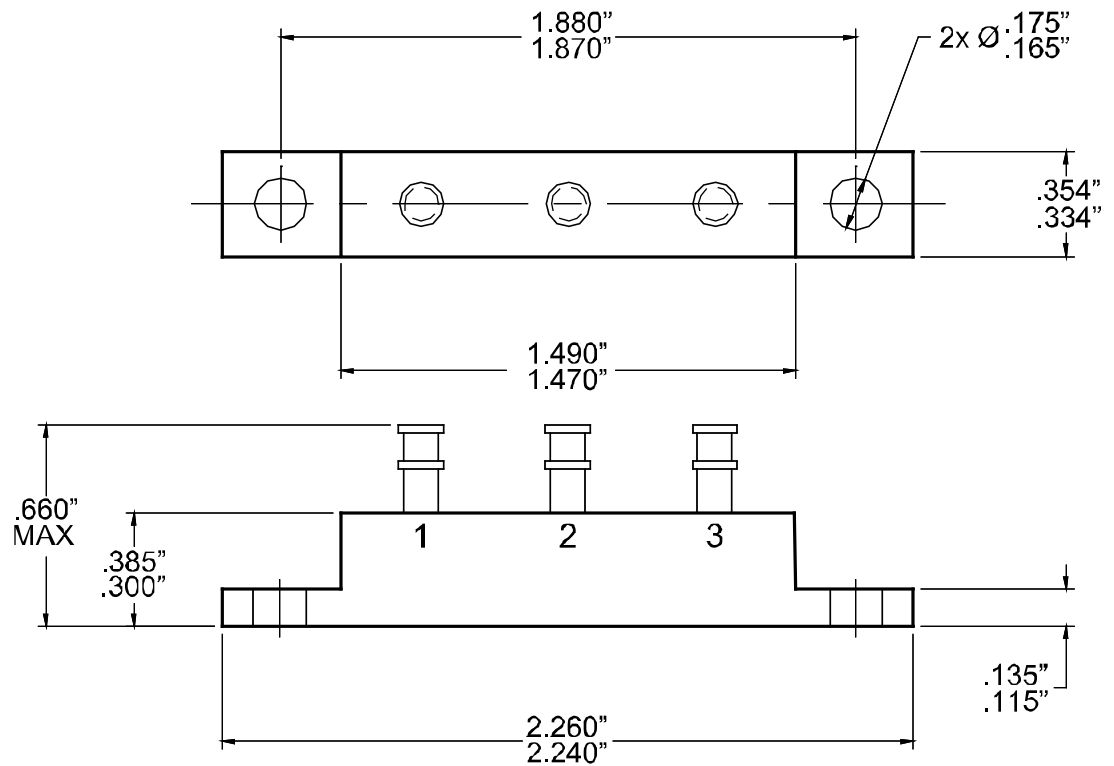
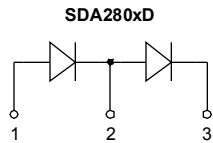
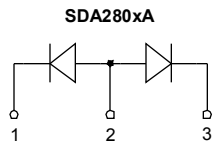
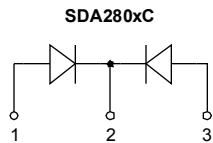
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 thru  
 SDA280G**

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:**



**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**

**DOC**