



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
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SDA380A THRU SDA380G

10 AMPS, 5 μ sec STANDARD RECOVERY CENTERTAP RECTIFIER

DESIGNER'S DATA SHEET

Part Number/Ordering Information ^{1/}
SDA380

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Screening ^{2/}
 — = Not Screened
 TX = TX Level
 TXV = TXV
 S = S Level

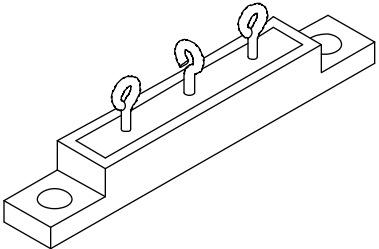
Configuration
 C = Common Cathode
 A = Common Anode
 D = Doubler

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

- Features:**
- Unheatsunk Average Output Current: 10 Amps
 - Low Reverse Leakage Current
 - Low Junction Capacitance
 - Hermetically Sealed Discretes
 - Aluminum Case for Maximum Thermal Conductivity
 - Common Cathode, Common Anode and Doubler Versions Available
 - Fast and Ultra Fast Recovery Versions Available – Contact Factory
 - TX and TXV Level screening Available

Maximum Ratings	Symbol	Value	Units
Peak Repetitive and Peak Surge Reverse Voltage	SDA380A		50
	SDA380B		100
	SDA380C	V_{RRM}	200
	SDA380D	V_{RSM}	400
	SDA380E	V_R	600
	SDA380F		800
	SDA380G		1000
Average Rectified Forward Current ^{4/} (Resistive Load, 60 hz Sine Wave, $T_A = 25^\circ\text{C}$, No Heatsink)	I_o	10	Amps
Peak Surge Current ^{3/} (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$, per leg)	I_{FSM}	125	Amps
Operating & Storage Temperature	Top & Tstg	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	5.0	$^\circ\text{C/W}$

SDA380



^{1/} For Ordering Information, Price, Operating Curves, and Availability- Contact Factory.
^{2/} Screening based on MIL-PRF-19500. Screening flows available on request.
^{3/} Both legs tied together
^{4/} Per leg



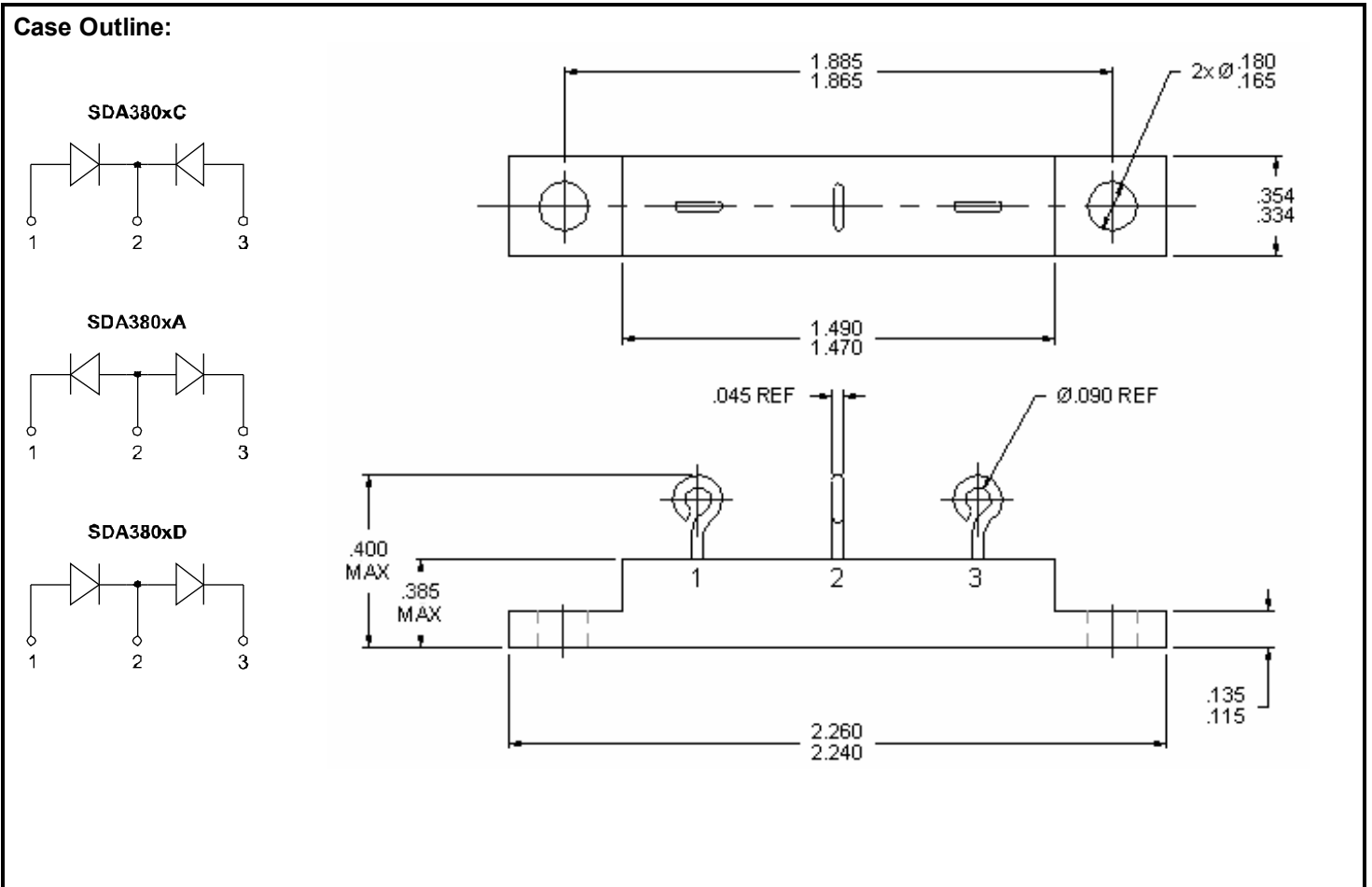
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**SDA380A
 thru
 SDA380G**

Electrical Characteristics	Symbol	Value	Units
Instantaneous Forward Voltage Drop ($I_F = 5A$, $T_A = 25^\circ C$, 300 - 500 μ sec pulse)	V_{F1}	1.1	V_{DC}
Instantaneous Forward Voltage Drop ^{5/} ($I_F = 5A$, $T_A = -55^\circ C$, 300 - 500 μ sec pulse)	V_{F2}	1.35	V_{DC}
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ C$, 300 μ sec pulse minimum)	I_{R1}	5	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μ sec pulse minimum)	I_{R2}	0.5	mA
Reverse Recovery Time ($T_A = 25^\circ C$, $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$)	T_{RR}	5	μ sec

5/ Guaranteed / not tested



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

DATA SHEET #: RA0023C

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