Solid State Devices, Inc.
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Phone: (562) 404-4474 * Fax: (562) 404-1773
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SDA380A THRU SDA380G

DESIGNER'S DATA SHEET

10 AMPS, 5μsec STANDARD RECOVERY CENTERTAP RECTIFIER

Part Number/Ordering Information 1/

SDA380 ___ ___ ___

Screening 2/
- ___ = Not Screened
- TX = TX Level
- TXV = TXV
- S = S Level

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

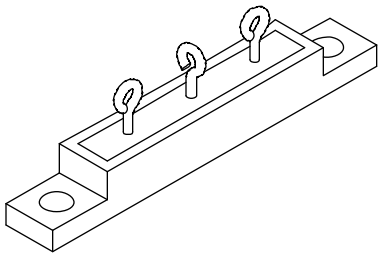
Voltage
- A = 50V
- B = 100V
- C = 200V
- D = 400V
- E = 600V
- F = 800V
- G = 1000V

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

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

SDA380



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	DOC

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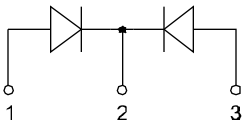
SDA380A thru SDA380G

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

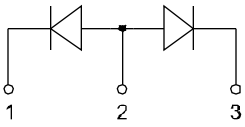
5/ Guaranteed / not tested

Case Outline:

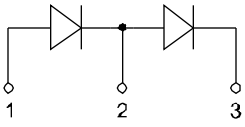
SDA380xC

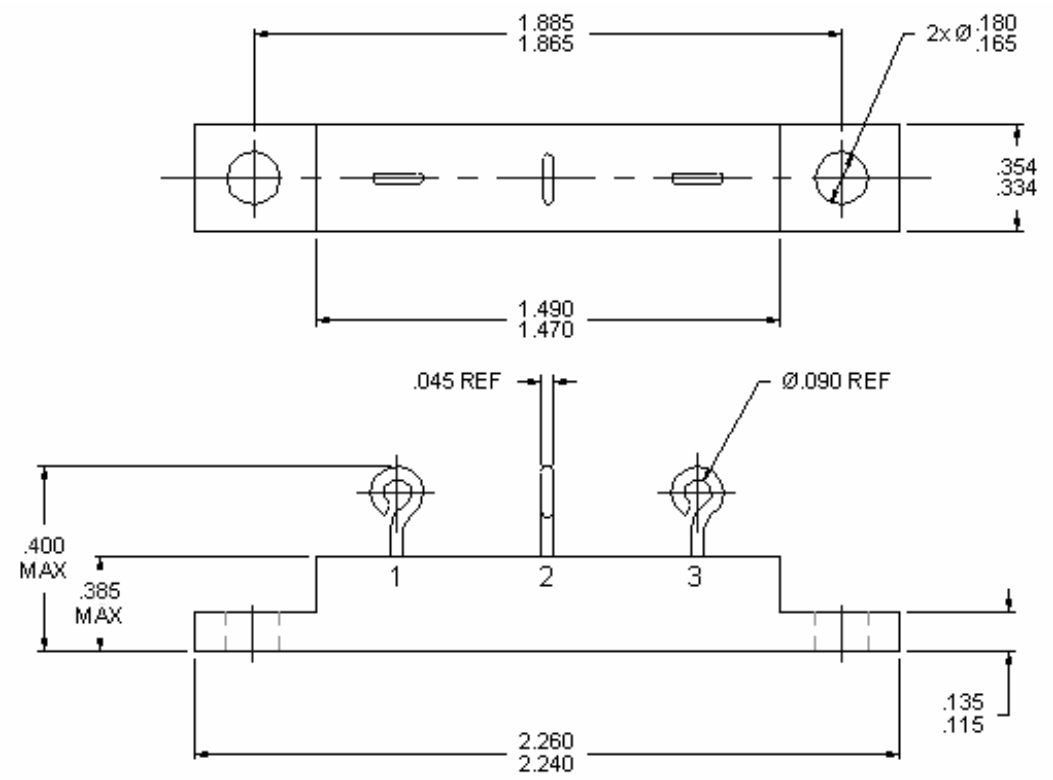


SDA380xA



SDA380xD





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