



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638

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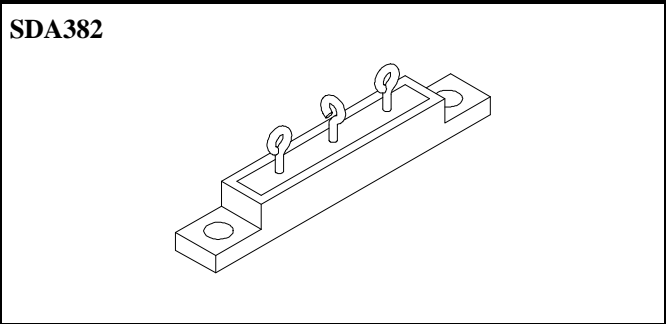
SDA382A THRU SDA382G

10 AMPS, 50 - 70 nsec ULTRAFAST CENTERTAP RECTIFIER

DESIGNER'S DATA SHEET

Features:

- Ultrafast Recovery: 70 nsec maximum
- Unheatsunk Average Output Current: 10 Amps
- Low Reverse Leakage Current
- Low Junction Capacitance
- Glass Passivated Rectifiers
- Hermetically Sealed Discretes
- Aluminum Case for Maximum Thermal Conductivity
- Common Anode and Doubler Versions Available
- TX and TXV Level screening Available



Maximum Ratings	Symbol	Value	Units
Peak Repetitive and Peak Surge Reverse Voltage	SDA382A	50	Volts
	SDA382B	100	
	SDA382C	200	
	SDA382D	400	
	SDA382E	600	
	SDA382F	800	
	SDA382G	1000	
Average Rectified Forward Current ² (Resistive Load, 60 hz Sine Wave, T _A = 25°C, No Heatsink)	I _O	10	Amps
Peak Surge Current ¹ (8.3 ms Pulse, Half Sine Wave, T _A = 25 °C, per leg)	I _{FSM}	75	Amps
Operating & Storage Temperature	Top & Tstg	-55 to +150	°C
Maximum Thermal Resistance Junction to Case	R _{θJC}	5.0	°C/W

^{1/} Both legs tied together

^{2/} Per leg



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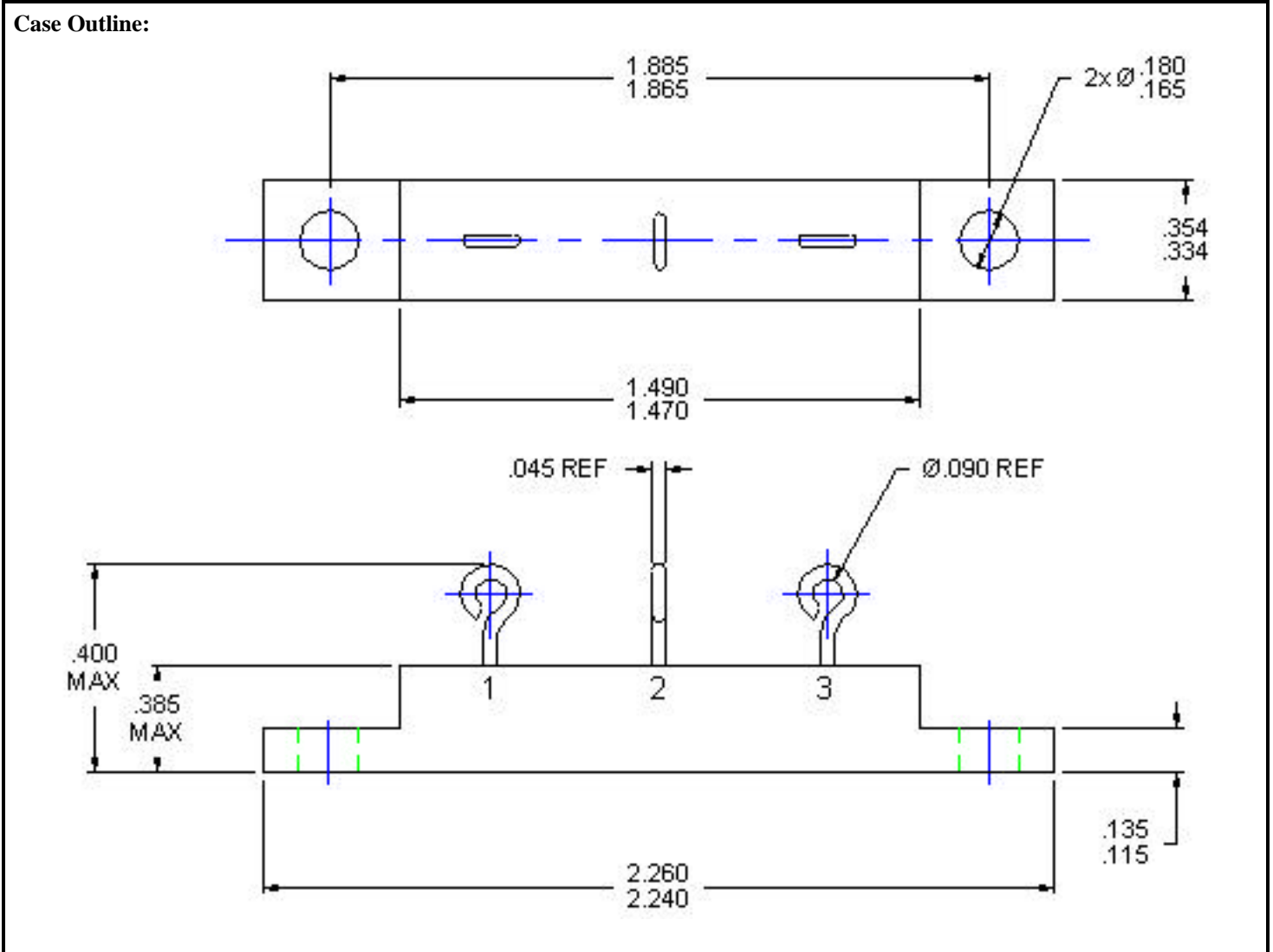
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**SDA382A
thru
SDA382G**

Electrical Characteristics		Symbol	Value	Units
Instantaneous Forward Voltage Drop ($I_F = 3A, T_A = 25^\circ C, 300 - 500 \mu sec$ pulse)	A - D 50-400V	V_{F1}	1.5	V_{DC}
	E 600V		1.7	
	F - G 800-1000V		1.9	
Instantaneous Forward Voltage Drop $\frac{1}{2}$ ($I_F = 3A, T_A = 25^\circ c, 300 - 500 \mu sec$ pulse)	A - D	V_{F2}	1.7	V_{DC}
	E		1.9	
	F - G		2.1	
Reverse Leakage Current (Rated $V_R, T_A = 25^\circ C, 300 \mu sec$ pulse minimum)		I_{R1}	10	μA
Reverse Leakage Current (Rated $V_R, T_A = 100^\circ C, 300 \mu sec$ pulse minimum)		I_{R2}	1	mA
Reverse Recovery Time ($T_A = 25^\circ C, I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$)	A - D	T_{RR}	50	nsec
	E		60	
	F - G		70	

1/ Guaranteed / not tested



FOR OPERATING CURVES, PLEASE CONTACT THE FACTORY