



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

ssdi@ssdi-power.com * www.ssdi-power.com

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

SDA382A

THRU

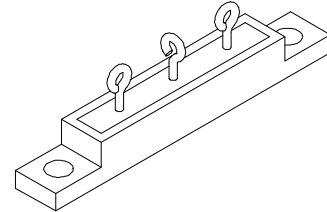
SDA382G

10 AMPS, 50 - 70 nsec

ULTRAFAST

CENTERTAP RECTIFIER

SDA382



Maximum Ratings

Symbol

Value

Units

Peak Repetitive and Peak Surge Reverse Voltage	SDA382A	V_{RRM} V_{RSM} V_R	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, $T_A = 25^\circ\text{C}$, No Heatsink)		I_o	10	Amps
Peak Surge Current ¹ (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$, per leg)		I_{FSM}	75	Amps
Operating & Storage Temperature		Top & Tstg	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case		$R_{\theta JC}$	5.0	$^\circ\text{C/W}$

^{1/} Both legs tied together

^{2/} 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 #: RA0025B



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

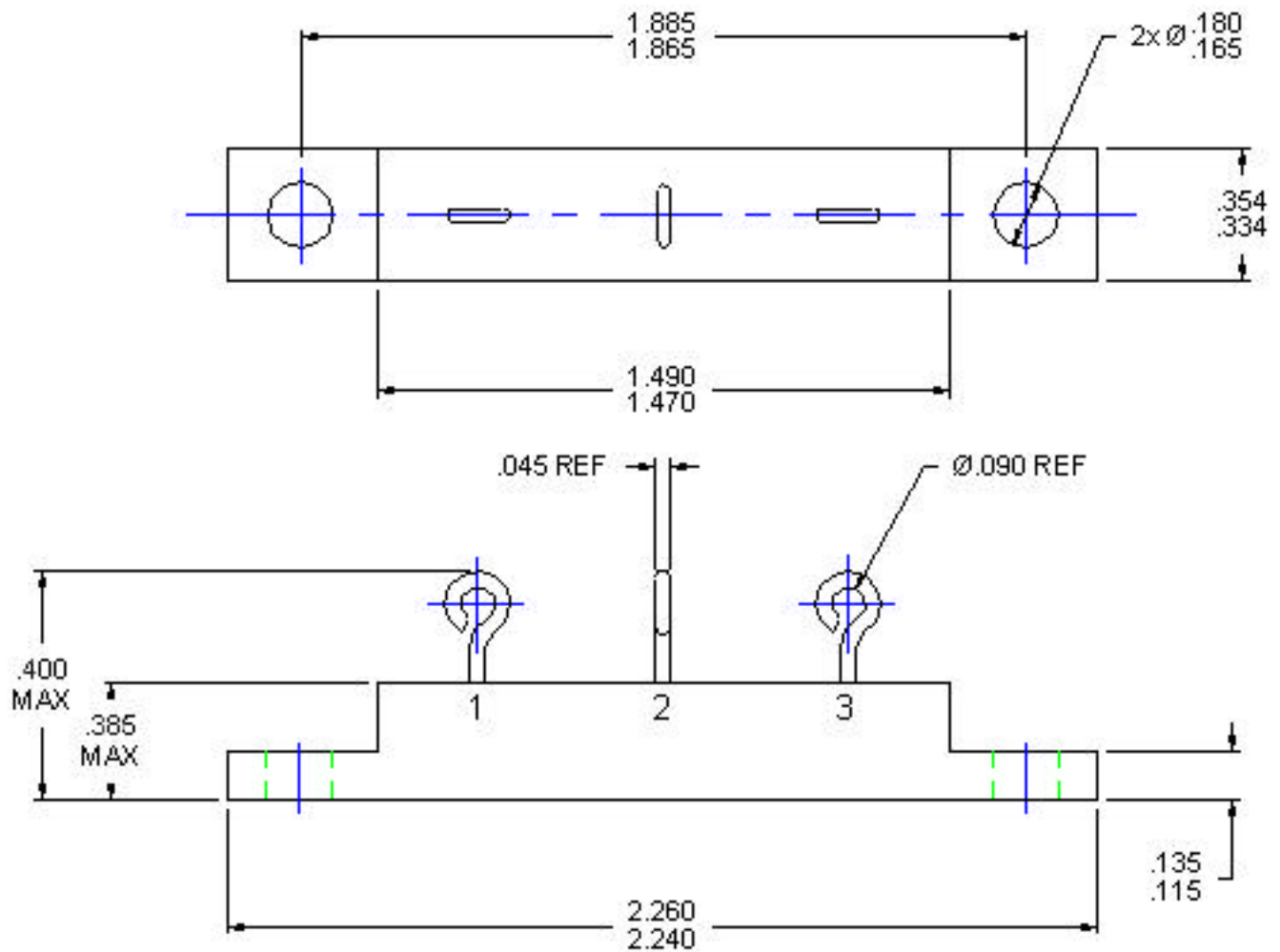
ssdi@ssdi-power.com * www.ssdi-power.com

**SDA382A
thru
SDA382G**

Electrical Characteristics		Symbol	Value	Units
Instantaneous Forward Voltage Drop ($I_F = 3A$, $T_A = 25^\circ C$, 300 - 500 μsec pulse)	A - D	V_{F1}	1.5	V_{DC}
	E		1.7	
	F - G		1.9	
Instantaneous Forward Voltage Drop $\frac{1}{2}$ ($I_F = 3A$, $T_A = 25^\circ C$, 300 - 500 μsec 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 μsec pulse minimum)		I_{R1}	10	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μsec 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	

$\frac{1}{2}$ / Guaranteed / not tested

Case Outline:



FOR OPERATING CURVES, PLEASE CONTACT THE FACTORY