



SOLID STATE DEVICES, INC.

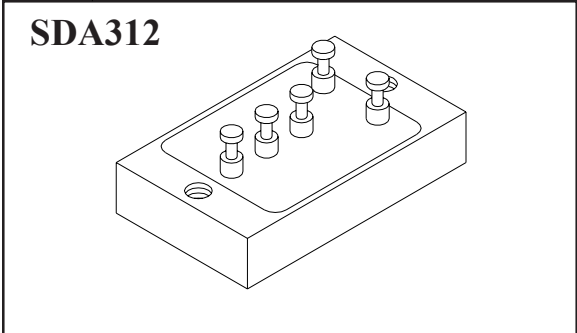
14701 Firestone Blvd. La Mirada, CA 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773

Designer's Data Sheet

**SDA312AF
 thru
 SDA312GF**

**10 AMPS
 180 - 200 nsec
 FAST RECOVERY
 3 PHASE BRIDGE ASSY**

- FEATURES:**
- **Fast Recovery: 180 -200 nsec Maximum**
 - **50 to 1000 V Blocking Voltage**
 - **Average Output Current 10 Amps**
 - **Low Reverse Leakage Current**
 - **Glass Passivated Rectifiers**
 - **Hermetically Sealed Discretes**
 - **Aluminum Case for Maximum Thermal Conductivity**
 - **TX and TXV Level Screening Available**



Maximum Ratings		SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	SDA312AF	V_{RRM} V_{RWM} V_R	50	Volts
	SDA312BF		100	
	SDA312CF		200	
	SDA312DF		400	
	SDA312EF		600	
	SDA312FF		800	
	SDA312GF		1000	
Average Rectified Forward Current (Resistive load, 60Hz, Sine Wave, $T_A = 25^\circ\text{C}$, No Heatsink)		I_o	10	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$, per leg)		I_{FSM}	75	Amps
Operating and Storage Temperature		$T_{OP} \ \& \ T_{stg}$	-55 TO +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case		$R_{\theta JC}$	1.5	$^\circ\text{C/W}$

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

DATA SHEET # : RC0034B

SDA312AF thru SDA312GF



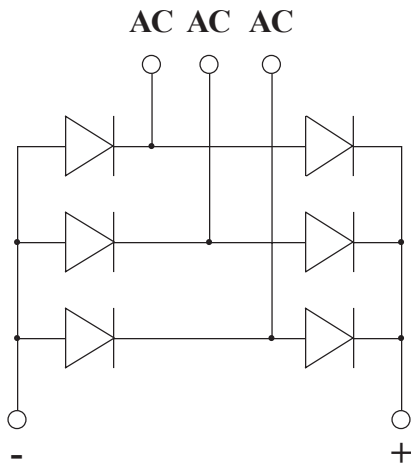
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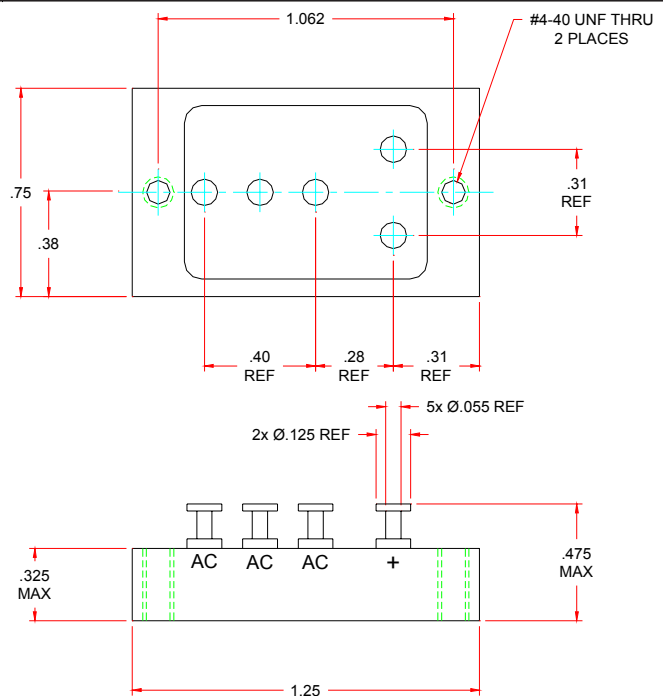
Electrical Characteristics ^{1/} (per leg)	SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop ($I_F = 3A, 300 - 500\mu\text{sec pulse}$)	V_{F1}	1.40	Vdc
Reverse Leakage Current (Rated $V_R, 300\mu\text{s pulse minimum}$)	I_{R1}	5	μA
Reverse Leakage Current (Rated $V_R, T_A = 100^\circ C, 300\mu\text{s pulse minimum}$)	I_{R2}	0.25	mA
Reverse Recovery Time SDA312AF-SDA312EF ($I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A$) SDA312FF-SDA312GF	t_{RR}	180 200	nsec

^{1/} $T_A = 25^\circ C$, Unless otherwise specified

CASE OUTLINE: SDA312



Tolerances:
XX: ".030
XXX: ".010



TEMPERATURE DERATING CURVE

