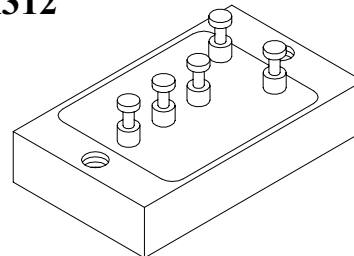




PRELIMINARY

SOLID STATE DEVICES, INC.14005 Stage Road * Santa Fe Springs, Ca 90670
Phone: (562) 404-4474 * Fax: (562) 404-1773**Designer's Data Sheet****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

**SDA312AF
thru
SDA312GF****10 AMPS
180 - 200 nsec
FAST RECOVERY
3 PHASE BRIDGE ASSY****SDA312**

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		$T_{OP} \text{ \& } T_{stg}$	-55 TO +150	$^{\circ}\text{C}$
Maximum Thermal Resistance Junction to Case		θ_{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 # : RC0034A

SDA312AF thru SDA312GF

PRELIMINARY



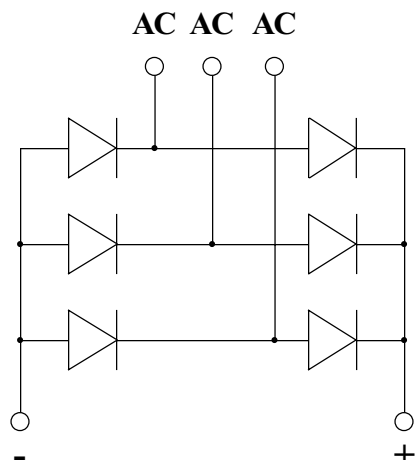
SOLID STATE DEVICES, INC.

14005 Stage Road * Santa Fe Springs, Ca 90670
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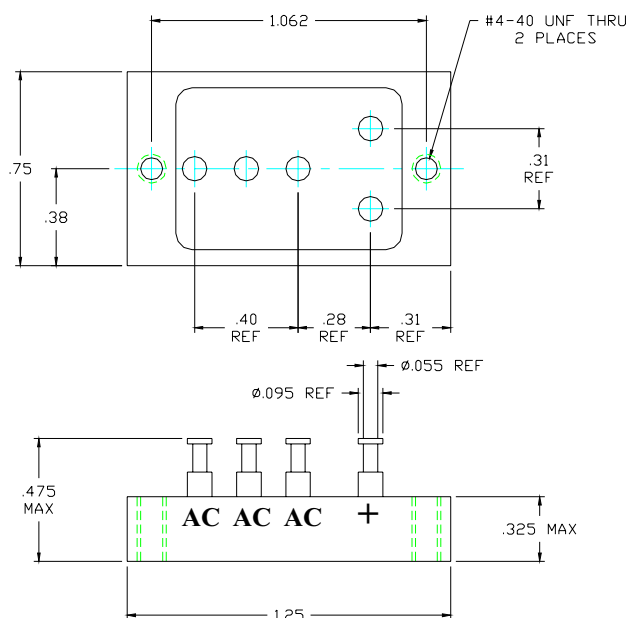
Electrical Characteristics ^{1/} (per leg)	SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop ($I_F = 3A$, 300 - 500 μ sec pulse)	V_{F1}	1.40	Vdc
Reverse Leakage Current (Rated V_R , 300 μ s pulse minimum)	I_{R1}	5	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μ s pulse minimum)	I_{R2}	0.25	mA
Reverse Recovery Time SDA312AF-SDA312AE ($I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$) SDA312FF-SDA312GF	t_{RR}	180 200	nsec

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

CASE OUTLINE: SDA312



Tolerances:
XX: ± 0.30
XXX: ± 0.010



TEMPERATURE DERATING CURVE

