



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

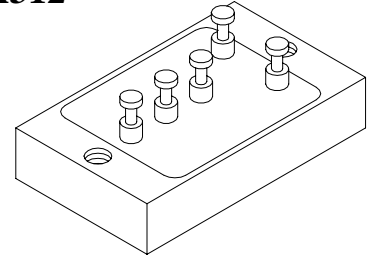
FEATURES:

- Recovery: 5 μ sec 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
- Consult Factory for Reverse Polarity

**SDA312A
thru
SDA312G**

**10 AMPS
5 μ sec
STANDARD RECOVERY
3 PHASE BRIDGE ASSY**

SDA312



Maximum Ratings		SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	SDA312A	V _{RRM} V _{RWM} V _R	50	Volts
	SDA312B		100	
	SDA312C		200	
	SDA312D		400	
	SDA312E		600	
	SDA312F		800	
	SDA312G		1000	
Average Rectified Forward Current (Resistive load, 60Hz, Sine Wave, T _A = 25°C, No Heatsink)		I _o	10	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, T _A = 25°C, per leg)		I _{FSM}	75	Amps
Operating and Storage Temperature		T _{OP} & T _{stg}	-55 TO +150	°C
Maximum Thermal Resistance Junction to Case		θ_{JC}	1.5	°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 # : RA0001A

SDA312A thru SDA312G

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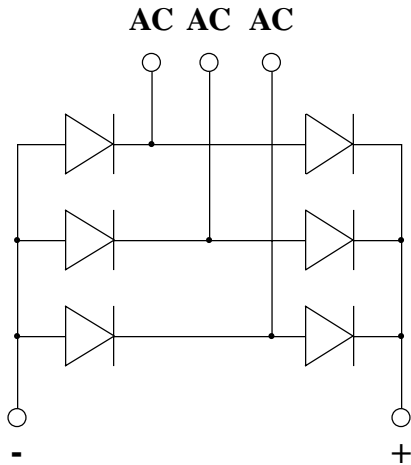
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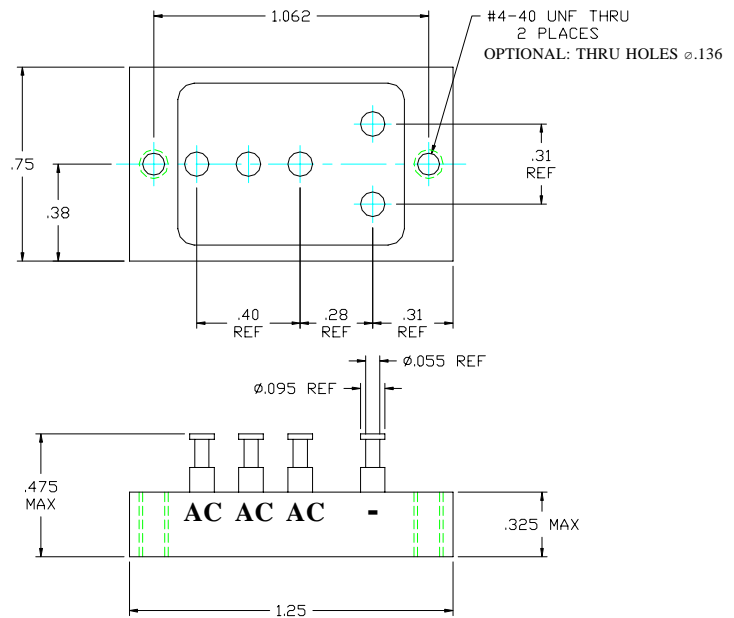
Electrical Characteristics ^{1/} (per leg)	SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop ($I_F = 3A$, 300 - 500 μ sec pulse) SDA312A-SDA312E SDA312F-SDA312G	V_{F1}	1.00 1.10	Vdc
Reverse Leakage Current (Rated V_R , 300 μ s pulse minimum)	I_{R1}	5	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μ s pulse minimum)	I_{R2}	0.10	mA
Reverse Recovery Time ($I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$)	t_{RR}	5	μ sec

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

CASE OUTLINE: SDA312



Tolerances:
XX: ± 0.30
XXX: ± 0.010



TEMPERATURE DERATING CURVE

