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

SDA312AF thru SDA312GF

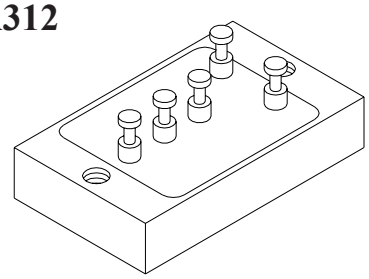
Designer's Data Sheet

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**

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°C, No Heatsink)		**Io**	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} & Tstg	-55 TO +150	°C
Maximum Thermal Resistance Junction to Case		$R_{\theta JC}$	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 # : RC0034B

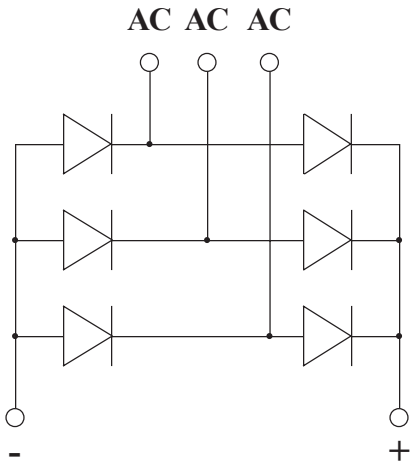
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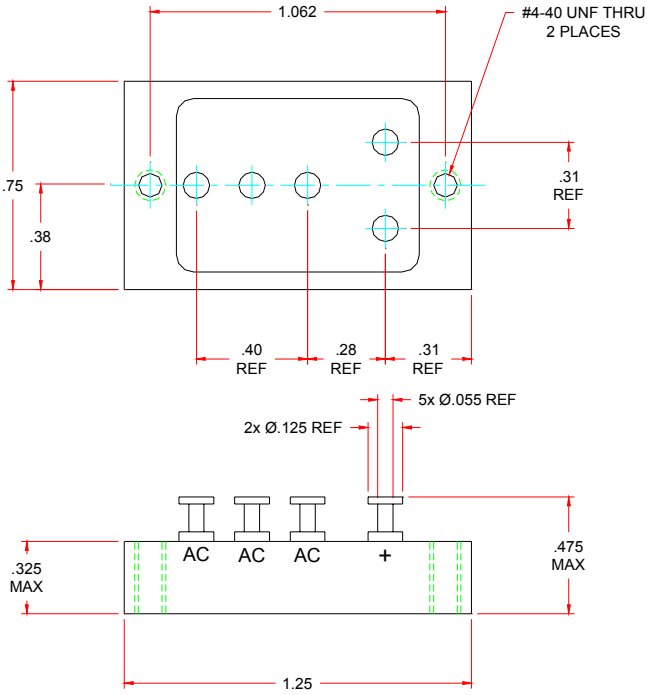
Electrical Characteristics 1/ (per leg)	SYMBOL	VALUE	UNITS
Instantaneous Forward Voltage Drop (I_F = 3A, 300 - 500µsec pulse)	V_{F1}	1.40	**Vdc**
Reverse Leakage Current (Rated V_R, 300µs pulse minimum)	I_{R1}	5	**µA**
Reverse Leakage Current (Rated V_R, T_A = 100°C, 300µs pulse minimum)	I_{R2}	0.25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

1/ T_A = 25°C, Unless otherwise specified

CASE OUTLINE: SDA312



Tolerances:
XX: "0.30
XXX: "0.010



TEMPERATURE DERATING CURVE

