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

SDA669 Series

DESIGNER'S DATA SHEET

30A / 600 - 1000V THREE PHASE BRIDGE RECTIFIER ASSEMBLY

Part Number / Ordering Information [1/]

SDA669 ___ **F** ___ ___

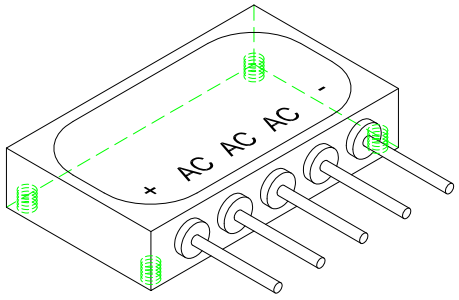
- **Lead Bend** [3/]: ___ = Straight Leads; UB = Up Bend; DB = Down Bend
- **Terminals** [2/ 3/]: _ = Copper Leads; T = Turret Terminals
- **Speed**: F = Fast (250 ns typ.)
- **Voltage**: J = 600 V; K = 800 V; M = 1000V

Features:

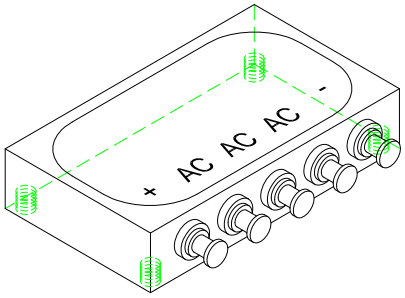
- **Up to 1000 V Blocking Voltage**
- **Average Output Current 30 Amps**
- **Low Reverse Leakage Current**
- **Constructed with Void-free, Hermetically Sealed Discretes**
- **Aluminum Case for Maximum Thermal Conductivity**
- **Small Package Size (1.500 x 0.875 x 0.310")**
- **TX and TXV & S Level Screening Available**
- **Ultra Fast (70ns) versions available. Contact Factory**

Maximum Ratings		Symbol	Value	Units
Peak Repetitive and Peak Surge Reverse Voltage	**SDA669J** **SDA669K** **SDA669M**	V_{RRM} V_{RSM} V_R	600 800 1000	Volts
Average Rectified Forward Current [4/] (Resistive Load, 60 hz Sine Wave, T_C = 55°C)		Io	30	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, T_A = 25 °C, per leg)		I_{FSM}	150	Amps
Operating & Storage Temperature		Top & Tstg	-55 to +150	ºC
Maximum Thermal Resistance Junction to Case		$R_{\Theta JC}$	1.0	ºC/W

SDA669 (__)



SDA669 (T)



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Electrical Characteristic [5/]		Symbol	Min	Typ	Max	Units
Instantaneous Forward Voltage Drop (T_A = 25°C, 300 - 500 µsec pulse)	I_F = 3A I_F = 9A	V_{F1} V_{F2}	—	—	1.15 1.30	V_{DC}
Reverse Leakage Current (Rated V_R, T_A = 25ºC, 300 µsec pulse minimum)		I_{R1}	—	—	5	µA
Reverse Leakage Current (Rated V_R, T_A = 100ºC, 300 µsec pulse minimum)		I_{R2}	—	—	60	µA
Reverse Recovery Time (T_A = 25°C, I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A)		t_{RR}	—	250	325	nsec

NOTES:

* Pulse Test: Pulse Width = 300µsec, Duty Cycle = 2%

1/ For Ordering Information, Price, and Availability Contact Factory.

2/ For Package Outlines Contact Factory.

3/ Up and Down Bend Configurations are Available for '__' (Leaded) Packages Only.

4/ Derate Linearly at 0.28A/ºC for T_C > 55ºC.

5/ Unless Otherwise Specified, All Electrical Characteristics @25ºC.

Available Part Numbers:

SDA669JF; SDA669JFT
SDA669KF; SDA669KFT
SDA669MF; SDA669MFT

Mounting Diagram: 2/

