Solid State Devices, Inc.
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SDA803A thru SDA803D

HIGH RELIABILITY
20 AMP, 50 – 300 VOLTS
ULTRA FAST RECOVERY
SINGLE PHASE BRIDGE RECTIFIER ASSEMBLY

Designer's Data Sheet

Part Number/Ordering Information [1/]

SDA803 ___

Screening [2/]
__ = Not Screened
TX = TX Level
TXV = TXV
S = S Level

Peak Inverse Voltage (per leg)
A = 50V
B = 100V
C = 200V
D = 300V

FEATURES:
- **Ultra Fast Reverse Recovery Time 50 ns Max**
- **Average Output Current 20 Amps @ 55°C**
- **Max. Thermal Resistance 4.0°C/Watt**
- **Aluminum Case Provides Maximum Thermal Conductivity**
- **Hermetically Sealed Diode Cells**
- **Turret Terminals**
- **Available in Standard, Fast, and Hyper Fast Versions**
- **TX, TXV, and S-Level Screening Available**

ELECTRICAL CHARACTERISTICS [3/]

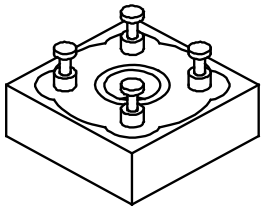
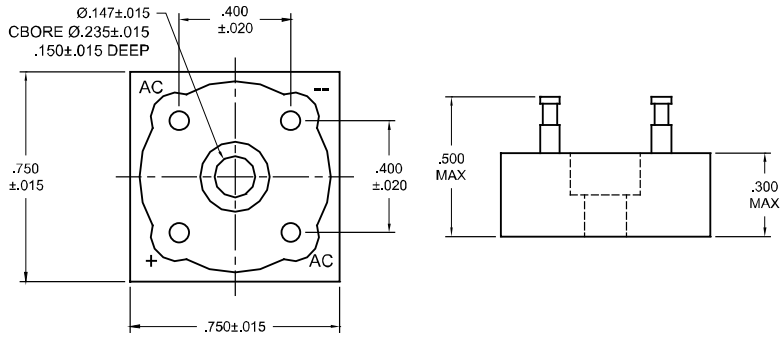
Part Number	Peak Inverse Voltage (per leg)	Sine Wave RMS Input Voltage Max.	Reverse[4/] Recovery Time	Average DC Output Current T_C=Case Temp		Average DC Output Current T_A= Ambient Temp (no heat sink)		Peak Forward Surge Current (1 Cycle)	Peak Repetitive Forward Current	Maximum Forward Voltage (per leg) @ 6 ADC	Maximum Reverse Current (per leg) @ PIV	
Symbol	**PIV**	**V_r**	**T_{rr}**	**$I_{F(AV)}$**		**$I_{F(AV)}$**		**I_{FSM}**	**I_{FRM}**	**V_F**	**I_R**	
Units	**Volts**	**Volts**	**ns**	**Amps**		**Amps**		**Amps**	**Amps**	**Volts**	**µA**	
Conditions			Max	55°C	100°C	55°C	100°C				25°C	100°C
SDA803A	50	43.7	50	20	14	6.0	3.4	125	60	0.95	5	200
SDA803B	100	87.5	50	20	14	6.0	3.4	125	60	0.95	5	200
SDA803C	200	175	50	20	14	6.0	3.4	125	60	0.95	5	200
SDA803D	300	262	50	20	14	6.0	3.4	125	60	0.95	5	200

SDA803A thru SDA803D:

NOTES:

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

2/ Screened to MIL-PRF-19500.

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

4/ Recovery Conditions: I_F = 0.5 Amp, I_R = 1.0 Amp rec. to .25 Amp.