

Solid State Devices, Inc.

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DESIGNER'S DATA SHEET

Part Number / Ordering Information 1/

SDA165

Screening 2/ = Not Screened

> TX = TX LevelTXV = TXV Level

S = S Level

Voltage

A = 50 V

B = 100 V

C = 200 V

D = 400 V

E = 600 V

F = 800 V

G = 1000 V

SDA165A thru SDA165G

10 AMP 50-1000 VOLTS STANDARD RECOVERY SINGLE PHASE BRIDGE

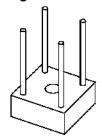
Features:

- Average Output Current 10 Amps @ 55°C
- Surge Current of 75 Amps
- PIV 50-1000 Volts Per Leg
- Operating & Storage Temp. Range -55°C to +150°C
- Electrically Insulated from Case
- Hermetically Sealed Void Free Rectifier Cells
- Available in Hyper Fast Recovery

Maximum Ratings ^{3/4/}		Symbol	Value	Units	
Peak Repetitive Reverse and DC Blocking Voltage	SDA165A SDA165B SDA165C SDA165D SDA165E SDA165F SDA165G	V _{RRM} V _{RWM} V _R	50 100 200 400 600 800 1000	Volts	
Average Rectified Forward Current Resistive Load, 60 Hz Sine Wave, T _C = 55°C			10	Amps	
Peak Surge Current 8.3 ms Pulse, Half Sine Wave			75	Amps	
Operating & Storage Temperature		T _{op} & T _{stg}	-55 to +150	°C	
Maximum Thermal Resistance Junction to Case (per Assembly)		$R_{ heta JC}$	5	°C/W	

SDA165 Package:

- 1/ For ordering information, price, operating curves, and availability Contact factory.
- 2/ Screening based on MIL-PRF-19500. Screening flows available on request.
- 3/ Unless otherwise specified, all electrical characteristics at 25°C.
- 4/ Unless otherwise specified, all electrical characteristics shall be per leg.





SDA165A thru SDA165G

Electrical Characteristics 3/4/	Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop $I_F = 3 \text{ A}, 300 \mu \text{sec pulse}$	V _F	_	1.10	v
Reverse Leakage Current V _R = Rated, 300 μsec pulse minimum	I _{R1}	_	5.0	μΑ
Reverse Leakage Current $T_A = 100$ °C $T_A = 100$ °C	I _{R2}	_	100	μΑ
Reverse Recovery Time $I_F = 0.5 \text{ A}$, $I_R = 1 \text{ A}$, $I_{RR} = 0.25 \text{ A}$	t _{RR}	_	5	μs

