



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

DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

SDA 167

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Terminals ^{2/} _ = Blade Terminals
 T = Turret Terminals

Finish _ = Anodized Case
 N = Ni Plated Case

Voltage D = 400 V
 E = 600 V
 F = 800 V
 G = 1000 V

SDA167 Series

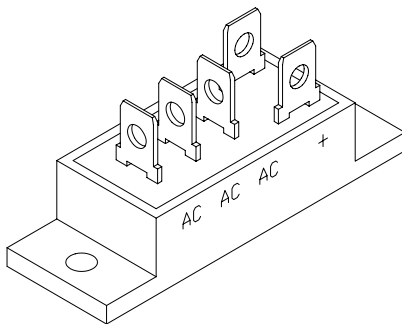
25 AMPS 400 - 1000V THREE PHASE BRIDGE RECTIFIER ASSEMBLY

Features:

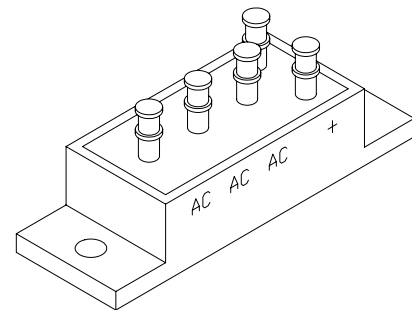
- PIV 400 - 1000 Volts
- Average Output Current 25 Amps
- Low Reverse Leakage Current
- Constructed with Void-Free, Hermetically Sealed Discretes
- Aluminum Case for Maximum Thermal Conductivity
- Electrically Insulated Aluminum Case
- Available in Fast and Ultra Fast Recovery Versions. Consult Factory.
- TX and TXV & S Level Screening Available. Contact Factory.

Maximum Ratings		Symbol	Value	Units
Peak Repetitive and Peak Surge Reverse Voltage	SDA167D	V_{RRM} V_{RSM} V_R	400	Volts
	SDA167E		600	
	SDA167F		800	
	SDA167G		1000	
Average Rectified Forward Current ^{3/ 4/} (Resistive Load, 60 Hz Sine Wave, $T_C = 55^\circ C$)		I_o	25	Amps
Peak Surge Current ^{5/} (8.3 ms Pulse, Superimposed on Rated Current at Rated Voltage, $T_C = 55^\circ C$)		I_{FSM}	150	Amps
Operating & Storage Temperature Maximum Junction Temperature		T_{OP} & T_{STG} T_J	-55 to +150 175	$^\circ C$
Maximum Thermal Resistance ^{3/} (Junction to Case)		$R_{\theta JC}$	1.5	$^\circ C/W$

SDA167 ()



SDA167 (T)



NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RA0048B

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SDA167 Series

Electrical Characteristic ^{4/ 5/}		Symbol	Min	Typ	Max	Units
Peak Reverse Voltage ($I_R = 50 \mu A$)	SDA167D	BVR	420	—	—	Volts
	SDA167E		620	—	—	
	SDA167F		820	—	—	
	SDA167G		1020	—	—	
Instantaneous Forward Voltage Drop (300 - 500 μ sec pulse)	$I_F = 3A$ $I_F = 9A$	V_{F1}	—	—	1.05 1.20	Volts
Reverse Leakage Current (Rated V_R , 300 μ sec pulse minimum)		I_{R1}	—	—	10	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μ sec pulse minimum)		I_{R2}	—	—	100	μA
Insulation Leakage (All Terminals to Case) $R_{INS} = 100 M\Omega$	$V_R = 1500V$		—	—	15	μA

NOTES:	Available Part Numbers	
	Part Number	Document
* Pulse Test: Pulse Width = 300 μ sec, Duty Cycle = 2%	SDA167D	70-0157-S167
<u>1/</u> For Ordering Information, Price, and Availability Contact Factory.	SDA167E	70-0157-S167
<u>2/</u> For Package Outlines Contact Factory.	SDA167F	70-0157-S167
<u>3/</u> Rating Applies to the Total Bridge.	SDA167G	70-0157-S167
<u>4/</u> Derate Linearly at 0.263A/ $^\circ C$ for $T_C > 55^\circ C$.	SDA167DT	70-0157-S167-1
<u>5/</u> Unless Otherwise Specified, All Electrical Characteristics @25 $^\circ C$.	SDA167ET	70-0157-S167-1
	SDA167FT	70-0157-S167-1
	SDA167GT	70-0157-S167-1