



SOLID STATE DEVICES, INC.

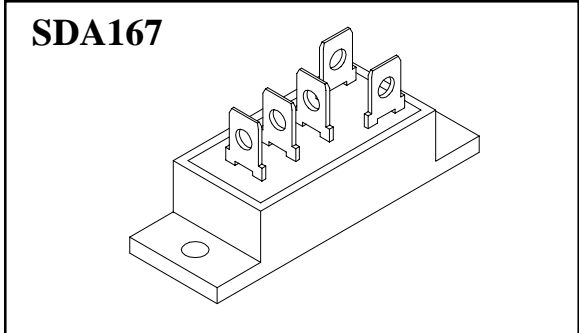
14830 Valley View Blvd * La Mirada, Ca 90638
 Phone: (562) 404-7855 * Fax: (562) 404-1773

SDA167HC Series

**33A / 600 - 1000V
 THREE PHASE BRIDGE
 RECTIFIER
 ASSEMBLY**

Designer's Data Sheet

- FEATURES:**
- Up to 1000 V Blocking Voltage
 - Average Output Current 33 Amps
 - Low Reverse Leakage Current
 - Constructed with Void-free, Hermetically Sealed Discretes
 - Aluminum Case for Maximum Thermal Conductivity
 - Electrically Insulated Aluminum Case
 - TX and TXV Level Screening Available
 - Standard and Fast Recovery Versions Available. Consult Factory.



Maximum Ratings		SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	SDA167HCEUF	V_{RRM}	600	Volts
	SDA167HCFUF	V_{RWM}	800	
	SDA167HCGUF	V_R	1000	
Average Rectified Forward Current ^{1/} , ^{2/} (Resistive load, 60Hz, Sine Wave, $T_C = 55^\circ C$)		I_o	33	Amps
Peak Surge Current ^{1/} (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ C$)		I_{FSM}	250	Amps
Operating and Storage Temperature Maximum Junction Temperature		T_{OP} & T_{stg} T_J	-65 TO +150 175	$^\circ C$
Maximum Thermal Resistance ^{1/} Junction to Case		θ_{JC}	0.85	$^\circ C/W$

Available Part Numbers: ^{4/}

SDA167HCEUF, SDA167HCEUFT
 SDA167HCFUF, SDA167HCFUFT
 SDA167HCGUF, SDA167HCGUFT
 SDA167HREUF, SDA167HREUFT
 SDA167HRFUF, SDA167HRFUFT
 SDA167HRGUF, SDA167HRGUFT

Part Number /Ordering Information

SDA167H C E UF-

Terminal: ^{3/} _ = Lug
 T = Turret

Finish: _ = Anodized Case
 N = Ni Plated Case

Voltage: E = 600V
 F = 800V
 G = 1000V

Polarity: C = Normal
 R = Reverse

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

DATA SHEET # : RA0018B

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Electrical Characteristics ^{5/} (per leg)		SYMBOL	MIN	MAX	UNITS
Peak Reverse Voltage ($I_R = 100\mu A$)	SDA167HCEUF	BVR	620	-	Vdc
	SDA167HCFUF		820	-	
	SDA167HCGUF		1020	-	
Instantaneous Forward Voltage Drop (300 - 500 μ sec pulse)	$I_F = 3A$	V_{F1}	-	1.42	Vdc
	$I_F = 9A$	V_{F2}	-	1.80	
Reverse Leakage Current (Rated V_R , 300 μ s pulse minimum)		I_{R1}	-	20	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μ s pulse minimum)		I_{R2}	-	750	μA
Reverse Recovery Time ($I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$)		t_{RR}	-	70	nsec
Isolation Resistance (All Terminals in Common to Case) ($V = 1500V$)		R_{ISO}	100	-	MΩ

NOTES:

- 1/ Rating Applies to the Total Bridge
- 2/ Derate Linearly at 0.35A/ $^\circ C$ for $T_C > 55^\circ C$.
- 3/ Other Termination available. Contact Factory
- 4/ For Package Outline and Part Availability Contact Factory.
- 5/ All Electrical Characteristics @25 $^\circ C$, Unless Otherwise Specified.

Package Outline

Part Number	Document
SDA167HCEUF	70-0157-S167
SDA167HCFUF	70-0157-S167
SDA167HCGUF	70-0157-S167
SDA167HREUF	70-0157-S167
SDA167HRFUF	70-0157-S167
SDA167HRGUF	70-0157-S167
SDA167HCEUFT	70-0157-S167-1
SDA167HCFUFT	70-0157-S167-1
SDA167HCGUFT	70-0157-S167-1
SDA167HREUFT	70-0157-S167-1
SDA167HRFUFT	70-0157-S167-1
SDA167HRGUFT	70-0157-S167-1