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

SDA167HC Series

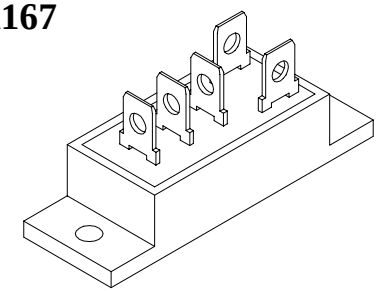
Designer's Data Sheet

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

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.**

SDA167



Maximum Ratings		SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	**SDA167HCEUF** **SDA167HCFUF** **SDA167HCGUF**	**V_{RRM}** **V_{RWM}** **V_R**	600 800 1000	**Volts**
Average Rectified Forward Current [1/, 2/] (Resistive load, 60Hz, Sine Wave, T_C = 55ºC)		**Io**	33	**Amps**
Peak Surge Current [1/] (8.3 ms Pulse, Half Sine Wave, T_A = 25ºC)		**I_{FSM}**	250	**Amps**
Operating and Storage Temperature **Maximum Junction Temperature**		**T_{OP} & Tstg** **T_J**	-65 TO +150 175	**ºC**
Maximum Thermal Resistance [1/] Junction to Case		θ_{JC}	0.85	**ºC/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 = 100µA)	**SDA167HCEUF**	**BVR**	620	-	**Vdc**
	SDA167HCFUF		820	-	
	SDA167HCGUF		1020	-	
Instantaneous Forward Voltage Drop (300 - 500µsec pulse)	I_F = 3A	**V_{F1}**	-	1.42	**Vdc**
	I_F = 9A	**V_{F2}**	-	1.80	
Reverse Leakage Current (Rated V_R, 300µs pulse minimum)		**I_{R1}**	-	20	**µA**
Reverse Leakage Current (Rated V_R, T_A = 100°C, 300µs 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 Linerly at 0.35A/°C for T_C > 55°C.

3/ Other Termination available. Contact Factory

4/ For Package Outline and Part Availability Contact Factory.

5/ All Electrical Characteristics @25°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