



Solid State Devices, Inc.

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SDA37AUF thru SDA37FUF

10 AMPS 100 – 600 VOLTS ULTRA FAST RECOVERY THREE PHASE BRIDGE RECTIFIER

Designer's Data Sheet

Part Number/Ordering Information^{1/}

SDA37 _ _ _

 | | |

 | | | **Screening^{2/}**

 | | | = Not Screened

 | | | TX = TX Level

 | | | TXV = TXV

 | | | S = S Level

 | | | **Reverse Recovery**

 | | | UF = Ultra Fast

 | | | **Peak Inverse Voltage (per leg)**

 | | | A = 100V, B = 200V, C = 300V,

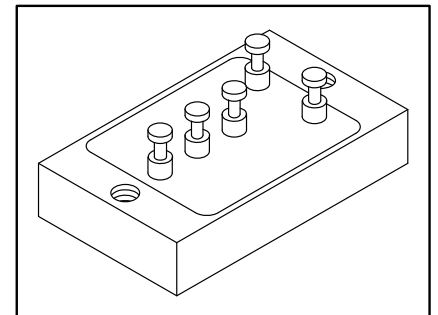
 | | | D = 400V, E = 500V, F = 600V,

- FEATURES:**
- Ultra Fast Reverse Recovery Time 70 ns Max
 - Average Output Current 10 Amps @ 50°C
 - PIV 100 to 600 Volts Per Leg
 - Efficient Thermal Design
 - Glass Passivated Diode Cells
 - Case Electrically Insulated
 - Aluminum Case
 - Available in Hyper Fast Recovery Times
 - Available in Higher Voltages
 - 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) @ 3 ADC	Maximum Reverse Current (per leg) @ PIV	
				I _{F(AV)}	I _{F(AV)}	I _{FSM}	I _{FRM}				V _F	I _R
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	50°C	100°C	25°C	55°C				25°C	100°C
SDA37AUF	100	70	70	10	7.0	3.0	2.2	75	18	1.35	20	500
SDA37BUF	200	140	70	10	7.0	3.0	2.2	75	18	1.35	20	500
SDA37CUF	300	210	70	10	7.0	3.0	2.2	75	18	1.35	20	500
SDA37DUF	400	280	70	10	7.0	3.0	2.2	75	18	1.35	20	500
SDA37EUF	500	350	70	10	7.0	3.0	2.2	75	18	1.35	20	500
SDA37FUF	600	420	70	10	7.0	3.0	2.2	75	18	1.35	20	500

SDA37 Package:



NOTES:

1. For Ordering Information, Price, Outline, Curves, and Availability- Contact Factory.
2. Screening based on MIL-PRF-19500. Screening flows available on request.
3. Unless Otherwise Specified, All Electrical Characteristics @25°C.
4. Recovery Conditions: I_F = 0.5 Amp, I_R = 1.0 Amp rec. to .25 Amp.