



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SDA47

600 AMP MATCHED POWER SCHOTTKY DIODE ARRAY 35 VOLTS

Designer's Data Sheet

Part Number / Ordering Information^{1/}

SDA47 \square Screening^{2/} = Not Screened
TX = TX Level
TXV = TXV Level
S = S Level

FEATURES:

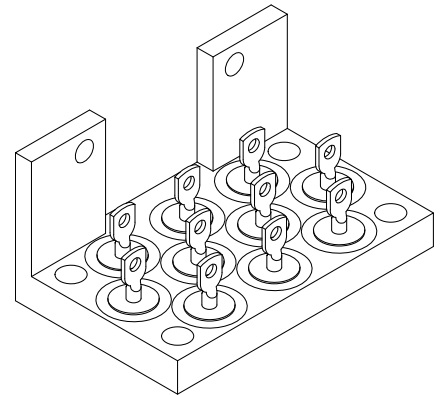
- Each diode is VF matched to within 20mV of each other
- Hermetically sealed Schottky diode cells
- Hot carrier copper heat sinking mounting bracket
- Number and configuration of diodes can be customized
- TX, TXV, and S level screening available - consult factory

MAXIMUM RATINGS ^{3/}	Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage ^{4/}	V_{RRM} V_{RWM} V_R	35	V
Average Rectified Forward Current (Resistive load, 60 Hz, sine wave, $T_A = 25^\circ\text{C}$)	I_O	600	A
Peak Surge Current (8.3 ms pulse, half sine wave superimposed on I_O , allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$) ^{4/}	I_{FSM}	800	A
Operating & Storage Temperature	T_{OP} & T_{stg}	-65 to +150	$^\circ\text{C}$
Maximum Thermal Resistance (Junction to Case)	$R_{\theta JC}$	1.0	$^\circ\text{C/W}$

NOTES:

- 1/ For ordering information, price, 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/ Per diode.

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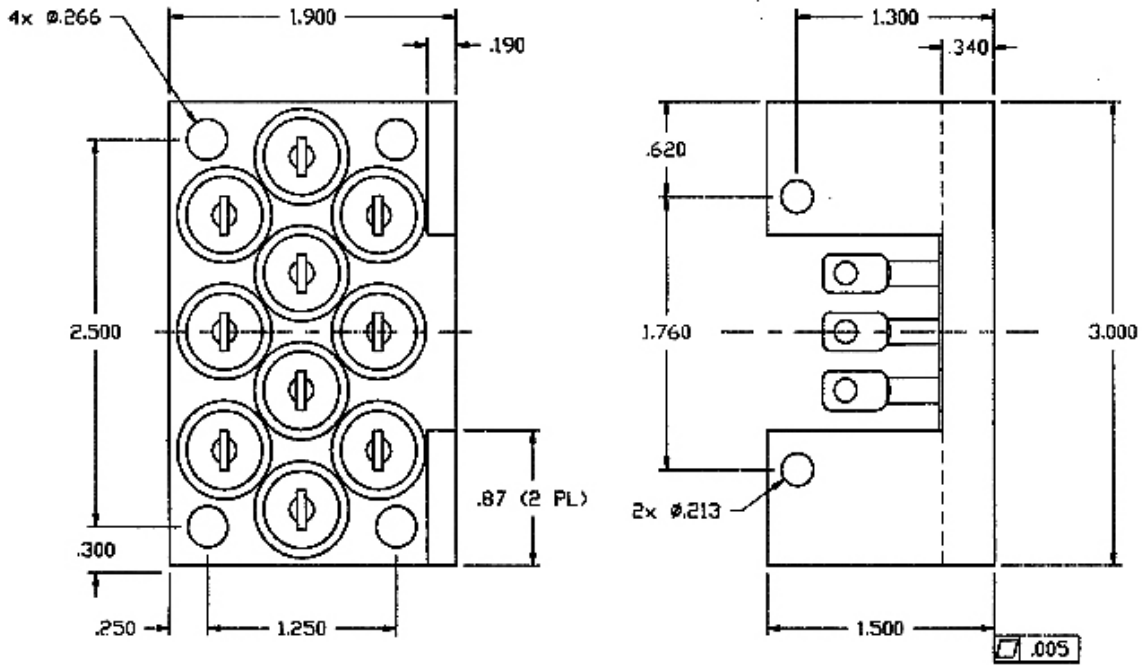
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ELECTRICAL CHARACTERISTICS (per diode) ^{3/}	Symbol	Max	Units
Instantaneous Forward Voltage Drop ($I_F = 50\text{ A}$, $T_A = 25^\circ\text{C}$, 300 μsec pulse)	V_{F1}	0.6	V
Instantaneous Forward Voltage Drop ($I_F = 50\text{ A}$, $T_A = -55^\circ\text{C}$, 300 μsec pulse)	V_{F2}	0.7	V
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μsec pulse minimum)	I_{R1}	50	mA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μsec pulse minimum)	I_{R2}	250	mA
Junction Capacitance ($V_R = 10\text{V}$, $f = 1\text{MHz}$, $T_A = 25^\circ\text{C}$)	C_J	3000	pF

Case Outline:



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

DATA SHEET #: RS0215B

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