



**SDA138A thru SDA138G**

**10 AMPS, 50 to 1,000 VOLTS  
 STANDARD RECOVERY  
 SINGLE PHASE BRIDGE RECTIFIER**

**Designer's Data Sheet**

**Part Number/Ordering Information <sup>1/</sup>**  
 SDA138 — —  
 L Screening <sup>2/</sup> — = Not Screened  
 TX = TX Level  
 TXV = TXV  
 S = S Level  
**Peak Inverse Voltage**  
 A = 50V, B = 100V, C = 200V, D = 400V  
 E = 600V, F = 800V, and G = 1,000V.

- FEATURES:**
- Average Output Current 10 Amps @ 55°C
  - PIV 50 to 1,000 Volts Per Leg
  - Maximum Thermal Resistance 5°C/W
  - All Welded Interconnects
  - Hermetically Sealed Diode Cells
  - Universal 2 Mounting Position Case
  - All Machined Aluminum Case
  - Available in Fast, Ultra Fast, and Hyper Fast Versions

**ELECTRICAL CHARACTERISTICS <sup>3/</sup>**

Part Number	Peak Inverse Voltage (per leg)	Sine Wave RMS Input Voltage Max.	Reverse <sup>4/</sup> Recovery Time	Average DC Output Current			Average DC Output Current		Peak 1 Cycle Forward Surge	Peak Recurrent Forward Surge	Maximum Forward Voltage Drop (per leg) @ 3 ADC	Reverse Current (per leg) @ PIV	
				T <sub>C</sub> =Case Temp	T <sub>A</sub> =Ambient Temp (No Heat Sink)	T <sub>A</sub> =Ambient Temp	T <sub>C</sub> =Case Temp	25°C				100°C	
Symbol	PIV	V <sub>r</sub>	T <sub>rr</sub>	I <sub>F(AV)</sub>			I <sub>F(AV)</sub>		I <sub>FSM</sub>	I <sub>FRM</sub>	V <sub>F</sub>	I <sub>R</sub>	
Units	Volts		µs	Amps			Amps		Amps	Amps	Volts	µA	
Conditions			Max	55°C	100°C	125°C	55°C	100°C			V <sub>F</sub>	25°C	100°C
<b>SDA138A</b>	50	35	5	10.0	7.0	5.0	1.5	1.0	100	30	1.1	2	50
<b>SDA138B</b>	100	70	5	10.0	7.0	5.0	1.5	1.0	100	30	1.1	2	50
<b>SDA138C</b>	200	140	5	10.0	7.0	5.0	1.5	1.0	100	30	1.1	2	50
<b>SDA138D</b>	400	280	5	10.0	7.0	5.0	1.5	1.0	100	30	1.1	2	50
<b>SDA138E</b>	600	420	5	10.0	7.0	5.0	1.5	1.0	100	30	1.1	2	50
<b>SDA138F</b>	800	560	5	10.0	7.0	5.0	1.5	1.0	100	30	1.1	2	50
<b>SDA138G</b>	1000	700	5	10.0	7.0	5.0	1.5	1.0	100	30	1.1	2	50

**SDA 138A thru SDA138G:**

**NOTES:**

- <sup>1/</sup> For Ordering Information, Price, Curves, and Availability- Contact Factory.  
<sup>2/</sup> Screened to MIL-PRF-19500.  
<sup>3/</sup> Unless Otherwise Specified, All Electrical Characteristics @25°C.  
<sup>4/</sup> Recovery Conditions: I<sub>F</sub> = 0.5 Amp, I<sub>R</sub> = 1.0 Amp rec. to .25 Amp.

