



**Solid State Devices, Inc.**

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**SDA676-12 thru SDA676-50**

**0.125 to 0.400 AMPS, 1,200 to 5,000 VOLTS  
 STANDARD RECOVERY  
 SINGLE PHASE BRIDGE RECTIFIER**

**Designer's Data Sheet**

**Part Number/Ordering Information<sup>1/</sup>**  
**SDA676 -**

┌ Screening <sup>2/</sup>    ─ = Not Screened  
                   TX = TX Level  
                   TXV = TXV  
                   S = S Level

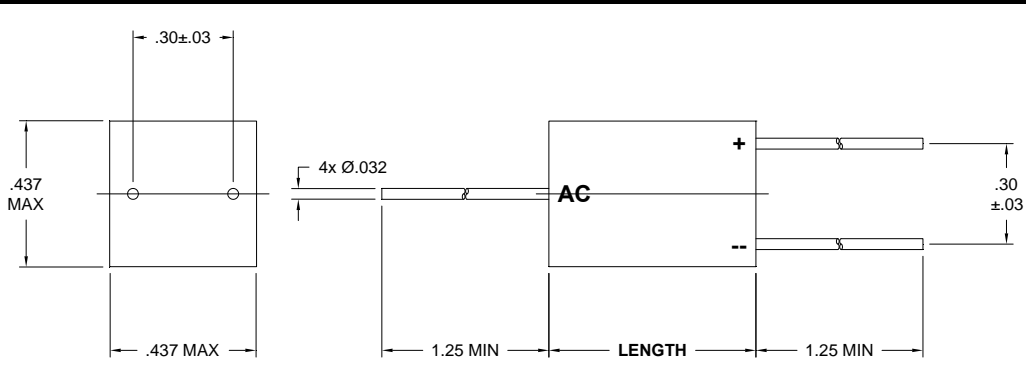
**Peak Inverse Voltage**  
 12 = 1,200V, 18 = 1,800V,  
 24 = 2,400V, 30 = 3,000V  
 36 = 3,600V, 42 = 4,200V  
 48 = 4,800V, 50 = 5,000V.

- FEATURES:**
- Miniature High Voltage Bridges
  - 0.125 to 0.400 Amp Ratings
  - PIV 1,200 to 5,000 Volts
  - Reverse Recovery Time 500ns Maximum
  - Controlled Avalanche Characteristics
  - Available in Fast, Ultra Fast and Hyper Fast Versions
  - TX, TXV, and S-Level Screening Available
  - Superior Replacement for Unitrode 676 Series

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

Part Number	Peak Inverse Voltage (per leg)	Body Size	Reverse Recovery Time <sup>4/</sup>	Average DC Output Current T <sub>C</sub> =Case Temp		Non-Repetitive Sinusoidal Surge (8.3ms)	Maximum Forward Voltage Drop (per leg)		Maximum Reverse Current (per leg) @ PIV	
				I <sub>F(AV)</sub>	I <sub>FSM</sub>		V <sub>F</sub>	I <sub>R</sub>		
Symbol	PIV		T <sub>rr</sub>	I <sub>F(AV)</sub>		I <sub>FSM</sub>	V <sub>F</sub>		I <sub>R</sub>	
Units	kV		ns	Amps		Amps	Volts	Amps	μA	
Conditions			Max	Air 25°C	Oil 100°C		V <sub>F</sub>	I <sub>F</sub>	25°C	100°C
<b>SDA676-12</b>	1.2	J	500	0.400	1.000	30	3.3	0.50	5	150
<b>SDA676-18</b>	1.8	K	500	0.350	0.850	30	4.0	0.50	5	150
<b>SDA676-24</b>	2.4	L	500	0.325	0.800	20	5.5	0.50	5	150
<b>SDA676-30</b>	3.0	M	500	0.250	0.625	20	7.7	0.50	5	150
<b>SDA676-36</b>	3.6	N	500	0.175	0.425	20	8.8	0.40	5	150
<b>SDA676-42</b>	4.2	O	500	0.150	0.375	20	9.5	0.35	5	150
<b>SDA676-48</b>	4.8	P	500	0.135	0.325	20	10	0.30	5	150
<b>SDA676-50</b>	5.0	P	500	0.125	0.300	20	10	0.25	5	150

- NOTES:**
1. For Ordering Information, Price, Curves, and Availability - Contact Factory.
  2. Screened to MIL-PRF-19500.
  3. Unless Otherwise Specified, T<sub>A</sub> = 25°C.
  4. Recovery Conditions:  
 I<sub>F</sub> = 10mA, I<sub>R</sub> = 10mA, I<sub>RR</sub> = 5mA



Body Size	J	K	L	M	N	O	P
<b>LENGTH, MAX</b>	0.562"	0.668"	0.875"	1.125"	1.250"	1.375"	1.625"

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

**DATA SHEET #: RA0076A**

**DOC**