



# Solid State Devices, Inc.

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## SDAD102 UF Series

### 2,500 to 15,000 VOLTS ULTRA FAST RECOVERY STACKABLE HIGH VOLTAGE RECTIFIER

### Designer's Data Sheet

**Part Number/Ordering Information <sup>1/</sup>**  
 SDAD10 2

**Screening <sup>2/</sup>**  
 — = Not Screened  
 TX = TX Level  
 TXV = TXV Level  
 S = S Level

**Reverse Recovery Time**  
 UF = Ultra Fast Recovery Time

**Voltage** 2.5 = 2.5kV, 5 = 5kV,  
 7.5 = 7.5kV, 10 = 10kV, and 15 =  
 15kV

**Power Rating** (See Below)

**Package Size** = 2 Inches Diameter

- FEATURES:**
- Stackable to 600 kV+
  - PIV 2.5kV to 15kV
  - High Current Ratings
  - Ultra Fast Reverse Recovery Time
  - Only Hermetically Sealed Rectifiers Used
  - Controlled Avalanche Rated
  - Modular Design for Easy Stacking
  - Storage and Operating Temps -65°C to +150°C
  - Available in Standard, Fast and Hyper Fast Versions
  - TX, TXV, and S-Level Screening Available <sup>2/</sup>

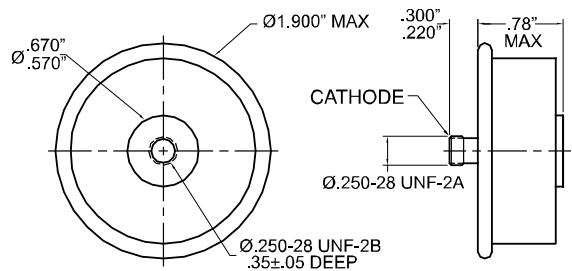
### ELECTRICAL CHARACTERISTICS <sup>3/</sup>

Part Number	Peak Inverse Voltage	Reverse Recovery Time <sup>5/</sup>	Average DC Output Current <sup>4/</sup> Tc = Case Temperature			Surge Non-repetitive	Maximum Forward Voltage Drop		Maximum Leakage Current @ PIV
	PIV (KV)	Max (ns)	If(avg)			Ifsm	Vf (V)	If (A)	Ir (uA)
	25 °C	25 °C	75 °C	50 °C	60 °C	100 °C	25 °C		25 °C
SDAD102 H 2.5 UF	2.5	70	9.00	10.6	10.0	200	4.35	6.3	30
SDAD102 H 5.0 UF	5.0	70	6.60	8.80	8.00	200	7.92	4.5	30
SDAD102 H 7.5 UF	7.5	70	2.00	3.00	2.50	125	10.9	1.5	15
SDAD102 H 10 UF	10	70	1.50	2.00	1.80	100	13.6	1.2	15
SDAD102 H 15 UF	15	70	1.00	1.40	1.20	100	18.9	0.7	15

**NOTES:**

- 1/ For Ordering Information, Price, 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/ Tc = 50 °C typical operation in oil.  
 Tc = 75 °C is typical ambient Ta = 25 °C unheatsunk.  
 Tc = 60 °C typical operation with extender plates in air.
- 5/ Recovery Conditions: If = 0.5 Amp, Ir = 1.0 Amp rec. to .25 Amp.

**SDAD102 Package:**



<p><b>NOTE:</b> All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.</p>	<p><b>DATA SHEET #: RA0087B</b></p>	<p><b>DOC</b></p>
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