



**Solid State Devices, Inc.**

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**SDAD101 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 1

**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** = 1 Inch Diameter

- FEATURES:**
- Stackable to 600 kV+
  - PIV 2.5 kV to 15 kV
  - 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 Tc = Case Temperature <sup>4/</sup>		Surge Non-repetitive	Maximum Forward Voltage Drop		Maximum Leakage Current @PIV
	PIV (KV)	Max (ns)	If(avg)		I <sub>fsm</sub>	V <sub>f</sub> (V)	I <sub>f</sub> (A)	I <sub>r</sub> (uA)
	25 °C	25 °C	75 °C	50 °C	100 °C	25 °C		25 °C
SDAD101 H 2.5 UF	2.5	70	1.62	3.60	125	3.96	1.62	20
SDAD101 H 5.0 UF	5.0	70	0.95	2.34	125	6.71	0.95	20
SDAD101 H 7.5 UF	7.5	70	0.81	1.80	125	9.90	0.81	20
SDAD101 H 10 UF	10	70	0.68	1.35	125	13.0	0.68	20
SDAD101 H 15 UF	15	70	0.54	0.95	25	18.9	0.54	20

**SDAD101 Package:**

**NOTES:**

- <sup>1/</sup> For Ordering Information, Price, Curves, and Availability- Contact Factory.
- <sup>2/</sup> Screening based on MIL-PRF-19500. Screening flows available on request.
- <sup>3/</sup> Unless Otherwise Specified, All Electrical Characteristics @25°C.
- <sup>4/</sup> Tc = 50 °C typical operation in oil.  
Tc = 75 °C is typical ambient Ta = 25 °C unheatsunk.
- <sup>5/</sup> Recovery Conditions: I<sub>F</sub> = 0.5 Amp, I<sub>R</sub> = 1.0 Amp rec. to .25 Amp.

