



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 ^{1/}
 SDAD10 1

Screening ^{2/}
 — = 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 ^{2/}

ELECTRICAL CHARACTERISTICS ^{3/}

Part Number	Peak Inverse Voltage	Reverse Recovery Time ^{5/}	Average DC Output Current Tc = Case Temperature ^{4/}		Surge Non-repetitive	Maximum Forward Voltage Drop		Maximum Leakage Current @PIV
	PIV (KV)	Max (ns)	If(avg)		I _{fsm}	V _f (V)	I _f (A)	I _r (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:

- ^{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.
- ^{5/} Recovery Conditions: I_F = 0.5 Amp, I_R = 1.0 Amp rec. to .25 Amp.

