



Solid State Devices, Inc.

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SDAD102 Series

2,500 to 15,000 VOLTS STANDARD RECOVERY STACKABLE HIGH VOLTAGE RECTIFIER

Designer's Data Sheet

Part Number/Ordering Information ^{1/}

SDAD10 2 — — — — + **Screening** ^{2/}

— = Not Screened
 TX = TX Level
 TXV = TXV
 S = S Level

+ **Reverse Recovery Time**
 — = Standard 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 160kV
- PIV 2.5kV to 15kV
- High Current Ratings
- Standard 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 Fast, Ultra Fast and Hyper Fast Versions
- Replacement Upgrade - Unitrode types UDE-2.5 through UDA-15
- TX, TXV, and S-Level Screening Available ^{2/}

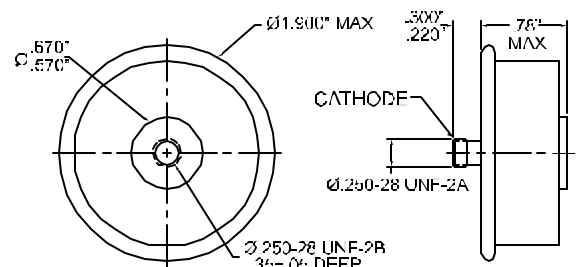
ELECTRICAL CHARACTERISTICS ^{3/}

Part Number	Peak Inverse Voltage	Reverse Recovery Time ^{5/}	Average DC Output Current ^{4/} Tc = Case Temperature			Surge Non-repetitive	Maximum Forward Voltage Drop		Maximum Leakage Current @PIV	Replacement Part Number
	PIV (KV)	Max (ns)	If(av)			Ifsm	Vf (V)	If (A)	Ir (uA)	
	25 °C	25 °C	75 °C	50 °C	60 °C	100 °C	25 °C		25 °C	
SDAD102 E 2.5	2.5	5000	6.00	7.70	7.00	200	5.0	3.0	10	UDE-2.5
SDAD102 B 2.5	2.5	5000	3.00	4.25	3.75	100	4.0	1.5	5	UDB-2.5
SDAD102 E 5.0	5.0	5000	4.50	5.50	5.00	200	10	2.2	10	UDE-5
SDAD102 B 5.0	5.0	5000	2.00	2.75	2.50	100	8.0	1.0	5	UDB-5 1N5600
SDAD102 A 5.0	5.0	5000	1.65	2.20	2.00	30	8.0	0.82	2	UDA-5
SDAD102 B 7.5	7.5	5000	1.33	2.00	1.65	100	12	0.7	5	UDB-7.5
SDAD102 A 7.5	7.5	5000	1.25	1.75	1.55	30	12	0.6	2	UDA-7.5
SDAD102 A 10	10	5000	1.00	1.40	1.25	30	16	0.5	2	UDA-10 1N5597
SDAD102 A 15	15	5000	0.67	0.90	0.80	30	25	0.33	2	UDA-15
High Current Versions										
SDAD102 H 2.5	2.5	5000	12.0	14.4	14.0	250	3.40	10	20	
SDAD102 H 5.0	5.0	5000	4.00	5.50	10.0	250	6.80	3.5	20	
SDAD102 H 7.5	7.5	5000	2.66	4.00	3.30	125	8.85	2.0	10	
SDAD102 H 10	10	5000	2.00	2.80	2.50	100	12.1	1.8	10	
SDAD102 H 15	15	5000	1.33	1.80	1.60	100	17.6	1.1	10	

SDAD102 Package:

NOTES:

- 1/ For Ordering Information, Price, Curves, and Availability- Contact Factory.
- 2/ Screened to MIL-PRF-19500.
- 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.



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

DATA SHEET #: RA0067B

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