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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 Level
  - 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

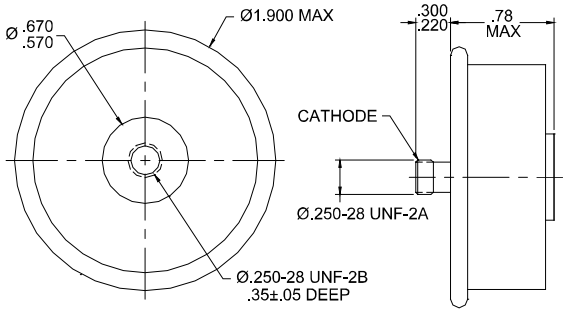
FEATURES:

- **Stackable to 600 kV+**
- **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- Microsemi/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(avg)**			**Ifsm**	**Vf (V)**	**If (A)**	**Ir (uA)**	
	25 °C	25 °C	75 °C	50 °C	60 °C	100 °C	25 °C		25 °C	
SDAD102E2.5	2.5	5000	6.00	7.70	7.00	200	5.0	3.0	10	UDE-2.5
SDAD102B2.5	2.5	5000	3.00	4.25	3.75	100	4.0	1.5	5	UDB-2.5
SDAD102E5.0	5.0	5000	4.50	5.50	5.00	200	10	2.2	10	UDE-5
SDAD102B5.0	5.0	5000	2.00	2.75	2.50	100	8.0	1.0	5	UDB-5 / 1N5600
SDAD102A5.0	5.0	5000	1.65	2.20	2.00	30	8.0	0.82	2	UDA-5
SDAD102B7.5	7.5	5000	1.33	2.00	1.65	100	12	0.7	5	UDB-7.5
SDAD102A7.5	7.5	5000	1.25	1.75	1.55	30	12	0.6	2	UDA-7.5
SDAD102A10	10	5000	1.00	1.40	1.25	30	16	0.5	2	UDA-10 / 1N5597
SDAD102A15	15	5000	0.67	0.90	0.80	30	25	0.33	2	UDA-15
High Current Versions										
SDAD102H2.5	2.5	5000	12.0	15.4	14.0	250	3.40	10	20	
SDAD102H5.0	5.0	5000	9.00	11.0	10.0	250	6.80	3.5	20	
SDAD102H7.5	7.5	5000	2.66	4.00	3.30	125	8.85	2.0	10	
SDAD102H10	10	5000	2.00	2.80	2.50	100	12.1	1.8	10	
SDAD102H15	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/ Screening based on MIL-PRF-19500. Screening flows available on request.
3/ Unless otherwise specified, all electrical characteristics @25ºC.
4/ Tc = 50 ºC typical operation in oil.
Tc = 75 ºC is typical ambient Ta = 25 ºC unheatsunk.
Tc = 60 ºC typical operation with extender plates in air.
5/ Recovery conditions: I_F = 0.5 Amp, I_R = 1.0 Amp rec. to .25 Amp.