



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
 Phone: (562) 404-7855 * Fax: (562) 404-1773
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**SDH20UF & UFSMS
 thru
 SDH60UF & UFSMS**

Designer's Data Sheet

Part Number / Ordering Information^{1/}

SDH ___ UF ___

L Screening^{2/} = None
 TX = TX Level
 TXV = TXV Level
 S = S Level

L Package
 ___ = Axial
 SMS = Surface Mount Square Tab

L Recovery Time
 UF = Ultra Fast

L Voltage
 20 = 2000 V
 25 = 2500 V
 30 = 3000 V
 40 = 4000 V
 50 = 5000 V
 60 = 6000 V

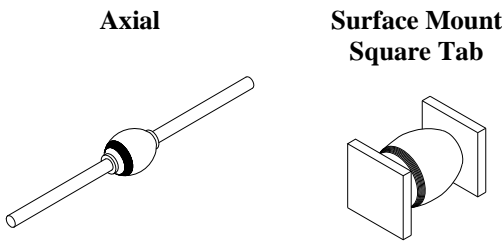
**1-1.5 AMP
 2000-6000 VOLTS
 ULTRA FAST RECOVERY
 HIGH VOLTAGE
 RECTIFIER**

- FEATURES:**
- Ultra Fast Recovery: 90 nsec Maximum
 - PIV to 6000 Volts
 - Hermetically Sealed Axial and Surface Mount Package
 - Void-Free Construction
 - Metallurgically Bonded
 - 175°C Maximum Operating Temperature
 - Replacement for 1N6512 thru 1N6518 and 1N6520 thru 1N6526 in Many Applications
 - TX, TXV, and Space Level Screening Available^{2/}
 - Available in Fast and Hyper Fast Versions. Contact Factory.

ELECTRICAL CHARACTERISTICS

Part Number	Peak Inverse Voltage	Average Rectifier Current		Maximum Reverse Current		Maximum Forward Voltage	Maximum Surge Current (1 Cycle)	Maximum Reverse Recovery Time	Maximum Junction Capacitance	Typical Thermal Impedance	
		I ₀	I ₀	IR	IR					θ _{JE}	θ _{JL}
Symbol	PIV	mA		µA		V _F	I _{FSM}	t _{RR}	C _J	θ _{JE}	θ _{JL}
Units	Volts	mA		µA		Volts	Amps	nsec	pF	°C/W	
Conditions		25°C	100°C	25°C	100°C	25°C	25°C	25°C	VR = 100V fT = 1MHZ		L = 1/8"
SDH20UF	2000	1.5	1.0	1.0	25	7.5	60	90	10	4	8
SDH25UF	2500	1.5	1.0	1.0	25	7.5	60	90	10	4	8
SDH30UF	3000	1.5	1.0	1.0	25	7.5	60	90	10	4	8
SDH40UF	4000	1.0	0.5	1.0	25	10.5	40	90	8	4	8
SDH50UF	5000	1.0	0.5	1.0	25	10.5	40	90	8	4	8
SDH60UF	6000	1.0	0.5	1.0	25	10.5	40	90	8	4	8

1/ For Ordering Information, Price, and Availability – Contact Factory.
 2/ Screening based on MIL-PRF-19500. Screening flows available on request.
 3/ Operating and testing over 10,000 V/inch may require encapsulation or immersion in a suitable dielectric material.
 4/ I_F = I₀; Max. forward voltage measured with instantaneous forward pulse of 300µsec minimum.
 5/ Max. Lead/End Tab temp. for soldering is 250°C, 3/8" from case for 5 sec maximum.
 6/ Operating and storage temperature: -65°C to +175°C.
 7/ Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=.25A, TA=25°C.



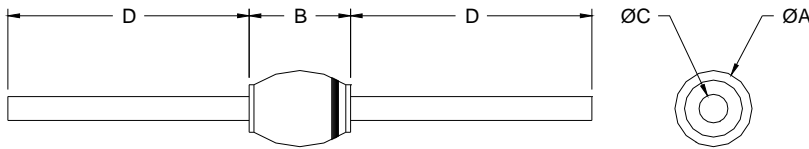


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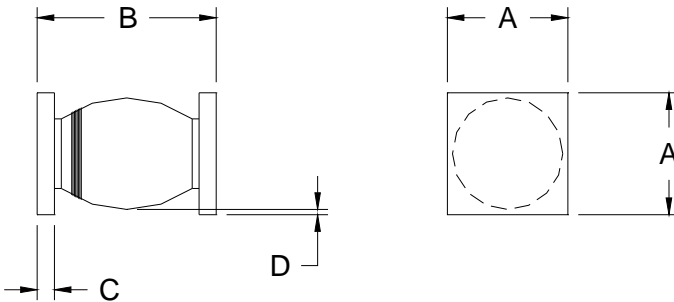
**SDH20UF & UFSMS
 thru
 SDH60UF & UFSMS**

PACKAGE OUTLINE: Axial



DIMENSIONS		
DIM	MIN	MAX
A	---	0.180"
B	.230"	.270"
C	0.047"	0.053"
D	1.00"	—

PACKAGE OUTLINE: Surface Mount Square Tab



DIMENSIONS		
DIM	MIN	MAX
A	0.195"	0.205"
B	0.280"	0.320"
C	0.020"	0.030"
D	0.002"	—

Notes:

Consult manufacturing for operating curves.

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

DATA SHEET #: RC0059D

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