PRELIMINARY

SOLID STATE DEVICES, INC.
14830 Valley View Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773

SUM20UF & UFSMS thru SUM50UF & UFSMS

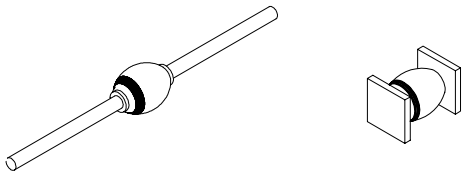
0.4 AMPS 2000 - 5000 VOLTS 60 nsec HIGH VOLTAGE ULTRA FAST RECTIFIER

Designer's Data Sheet

FEATURES:

- **Ultra Fast Recovery: 60 nsec Maximum**
- **PIV to 5000 Volts**
- **Hermetically Sealed Axial and Surface Mount Package**
- **Void-Free Construction**
- **Metallurgically Bonded**
- **175°C Maximum Operating Temperature**
- **TX, TXV, and Space Level Screening Available**

AXIAL **SURFACE MOUNT SQUARE TAB**



ELECTRICAL CHARACHTERISTICS

Part Number	Peak Inverse Voltage	Average Rectified Current		Maximum Reverse Current		Maximum Forward Voltage	Maximum Surge Current (1 Cycle)	Maximum Reverse Recovery Time	Maximum Junction Capacitance	Typical Thermal Impedance
Symbol	**PIV**	**I_O**		**I_R**		**V_F**	**I_{FSM}**	**t_{RR}**	**C_J**	**θ_{JL}/θ_{JE}**
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	V_R = 100V f_T = 1MHZ	L = 3/8"
SUM20UF	2000	400	250	1.0	15	10	25	60	10	16
SUM25UF	2500	400	250	1.0	15	10	25	60	10	16
SUM30UF	3000	400	250	1.0	15	13	25	60	10	16
SUM35UF	3500	400	250	1.0	15	13	25	60	10	16
SUM40UF	4000	400	250	1.0	15	13	25	60	10	16
SUM50UF	5000	400	250	1.0	15	13	25	60	10	16

NOTES:

1. Operating and testing over 10,000 V/inch may require encapsulation or immersion in suitable dielectric material.
2. Maximum forward voltage measured with instantaneous forward pulse of 300µsec minimum.
3. Maximum lead/end tab temperature for soldering is 250°C, 3/8" from case for 5 sec maximum.
4. Operating and Storage temperature: -65 to +175°C.
5. Reverse Recovery Test Conditions: I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A, T_A = 25°C.

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

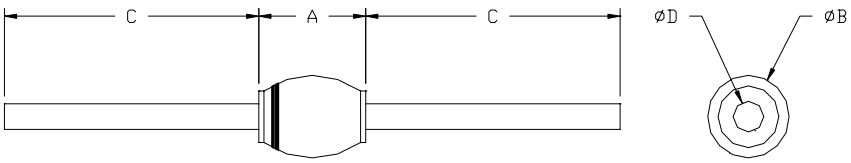
DATA SHEET # : RC0040A

SUM20UF & UFSMS thru SUM50UF & UFSMS

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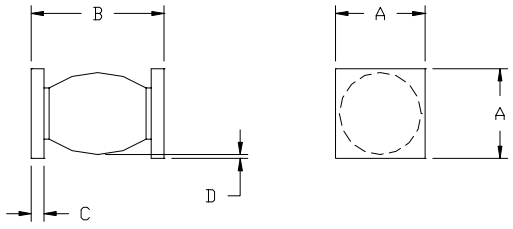
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PACKAGE OUTLINE: AXIAL RECTIFIER



DIMENSIONS		
DIM	MIN.	MAX.
A	--	.300"
B	.065"	.165"
C	1.00"	--
D	.047"	.053"

CASE OUTLINE: SURFACE MOUNT SQUARE TAB (SMS)



DIMENSIONS		
DIM	MIN.	MAX.
A	170	.180"
B	.285"	.325"
C	.020"	.030"
D	.002"	--

NOTES:
Consult manufacturing for operating curves.