



SOLID STATE DEVICES, INC.

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Designer's Data Sheet

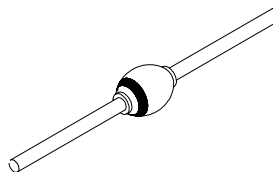
FEATURES:

- Fast Recovery: 180 nsec Maximum
- PIV to 9000 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

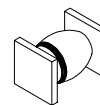
SUM60F & FSMS thru SUM90F & FSMS

**0.5 AMPS
6000 - 9000 VOLTS
180 nsec
HIGH VOLTAGE
RECTIFIER**

AXIAL



SURFACE MOUNT
SQUARE TAB



ELECTRICAL CHARACTERISTICS

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 _r = 1MHZ	L = 3/8"
SUM60F	6000	500	300	1.0	15	13	25	180	8	18
SUM70F	7000	500	300	1.0	15	13	25	180	8	18
SUM80F	8000	500	300	1.0	15	13	25	180	8	18
SUM90F	9000	500	300	1.0	15	13	25	180	8	18

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 # : RC0037B

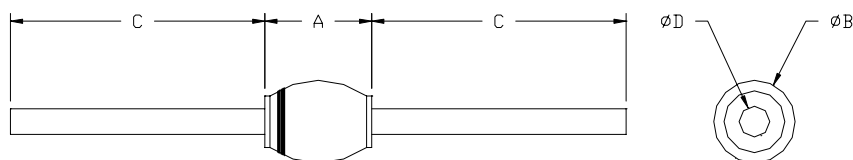
SUM60F & FSMS thru SUM90F & FSMS



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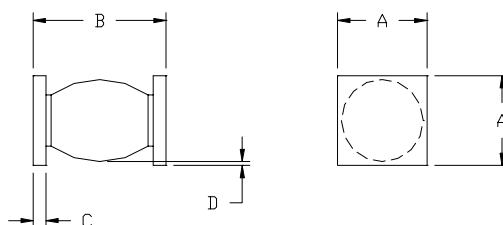
PACKAGE OUTLINE: AXIAL RECTIFIER



DIMENSIONS

DIM	MIN.	MAX.
A	--	.350"
B	.065"	.165"
C	1.00"	--
D	.047"	.053"

CASE OUTLINE: SURFACE MOUNT SQUARE TAB (SMS)



DIMENSIONS

DIM	MIN.	MAX.
A	170	.180"
B	.330"	.380"
C	.020"	.030"
D	.002"	--

NOTES:

Consult manufacturing for operating curves.