



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773
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SAM50FA

**0.5 Amp
5000 VOLTS
150 nsec
HIGH VOLTAGE
RECTIFIER**

Designer's Data Sheet

Part Number / Ordering Information ^{1/}

SAM 50 FA _ _

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

 L Package
 _ = Axial
 SMS = Surface Mount Square Tab

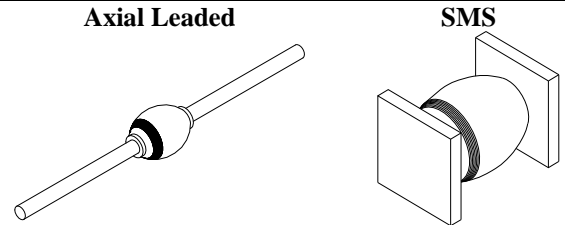
 L Recovery Time
 F = Fast Recovery

 L Voltage
 50 = 5000

- FEATURES:**
- Ultra Fast and Fast Recovery: 150 nsec Maximum
 - Hermetically Sealed Surface Mount Package
 - Void Free Construction
 - Metallurgically Bonded
 - 175°C Maximum Operating Temperature
 - TX, TXV, and Space Level Screening Available^{2/}

Maximum Ratings	Symbol	Value	Units
Peak Inverse Voltage	PIV	5000	Volts
Average Rectified Forward Current	I _o	500 300	mA
Maximum Reverse Current	I _R	3.0 15	µA
Maximum Forward Voltage @ I _F = 500 mA	V _F	13	Volts
Maximum Surge Current 1 Cycle	I _{FSM}	25	Amps
Maximum Reverse Recovery Time	trr	150	nsec
Maximum Junction Capacitance (fT = 1MHz @ 100 Volts)	C _J	10	pf
Typical Thermal Impedance (L=3/8")	R _{θJL} / R _{θJE}	18	°C/W

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/ 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 the case for 5 sec maximum.
 6/ Operating and storage temperature: -65°C to +175°C.
 7/ Reverse Recovery Test Conditions: IF=.5A, IR=1mA, IRR=.25A, TA=25°C.





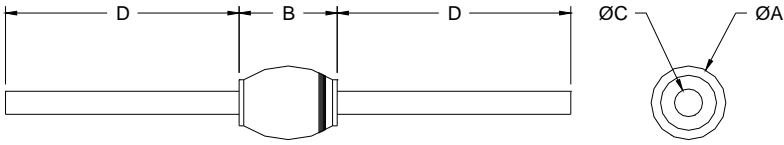
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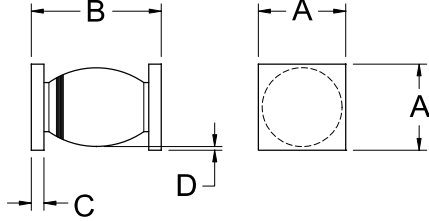
PACKAGE OUTLINE:

Axial



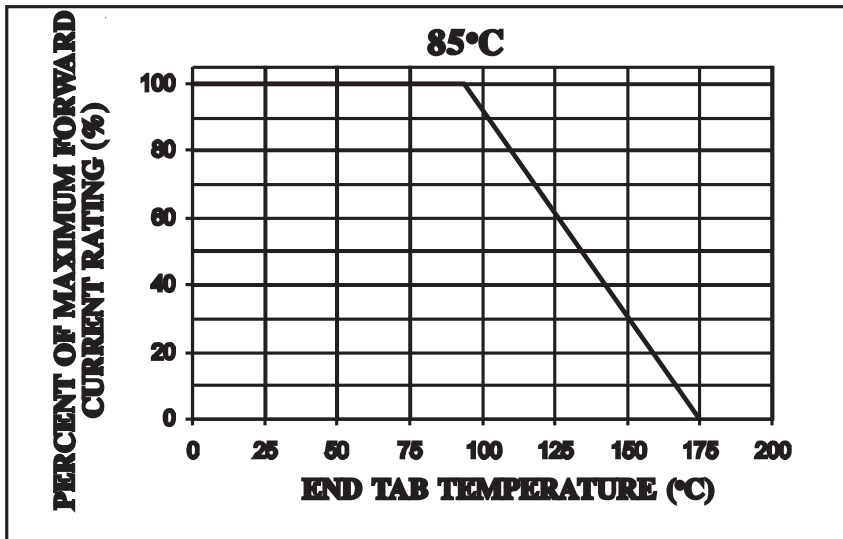
DIMENSIONS		
DIM	MIN	MAX
A	---	.300"
B	---	.425"
C	.047"	.05"
D	1.10"	---

Surface Mount Square Tab



DIMENSIONS		
DIM	MIN	MAX
A	.170"	.205"
B	.290"	.450"
C	.020"	.035"
D	.002"	---

TYPICAL 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 #: RV0033C

DOC