

**Solid State Devices, Inc.**

14701 Firestone Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

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Designer's Data Sheet**Part Number / Ordering Information**^{1/}

SAM 50 FA — —

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

— **Package**
 — = Axial
 SMS = Surface Mount Square Tab

— **Recovery Time**
 F = Fast Recovery

— **Voltage**
 50 = 5000

SAM50FA

0.5 Amp
5000 VOLTS
150 nsec
HIGH VOLTAGE
RECTIFIER

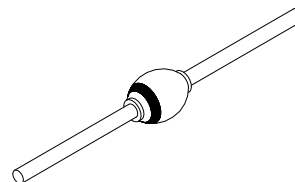
FEATURES:

- 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/}

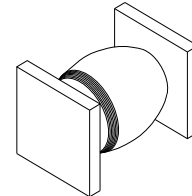
Maximum Ratings		Symbol	Value	Units
Peak Inverse Voltage		PIV	5000	Volts
Average Rectified Forward Current	25°C	I _o	500	mA
	100°C		300	
Maximum Reverse Current	25°C	I _R	3.0	μA
	100°C		15	
Maximum Forward Voltage @ I _F = 500 mA		V _F	13	Volts
Maximum Surge Current 1 Cycle		I _{FSM}	25	Amps
Maximum 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.

Axial Ledged



SMS



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**



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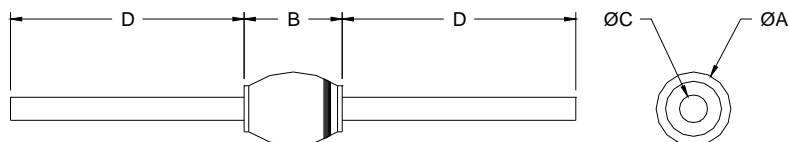
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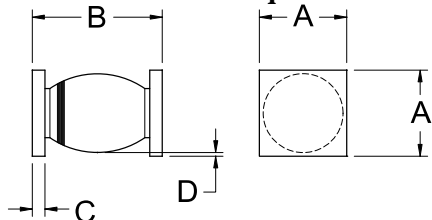
SAM50FA

PACKAGE OUTLINE:

Axial



Surface Mount Square Tab



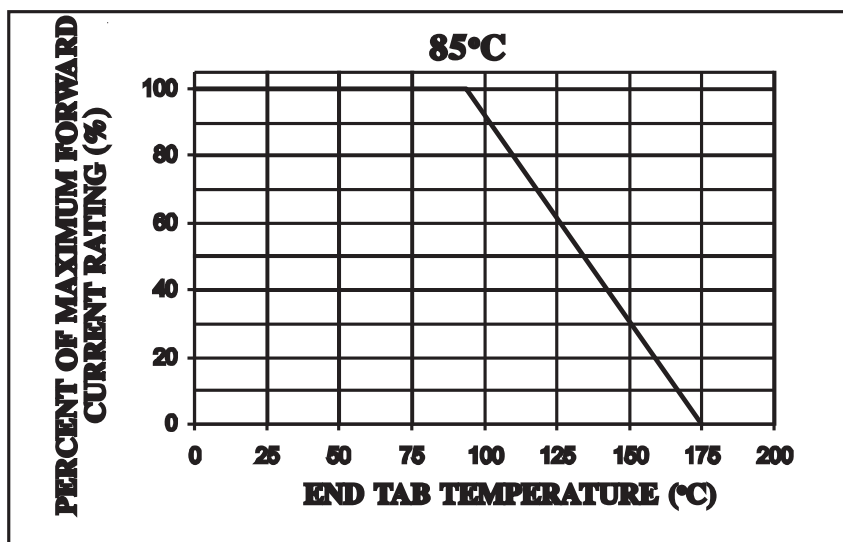
DIMENSIONS

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

DIMENSIONS

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

TYPICAL OPERATING CURVES



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