

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/}

SUM 8.2 F

L 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

$$8.2 = 8200 \text{ V}$$

SUM8.2F & FSMS

**0.5 AMP
8200 VOLTS
450 nsec
HIGH VOLTAGE
RECTIFIER**

FEATURES:

- **Fast Recovery: 450 nsec Maximum**
- **PIV 8200 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^{2/}**

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
Symbol	PIV	I ₀		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"
SUM8.2F	8200	500	300	1.0	15	13	25	450	8	18

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.

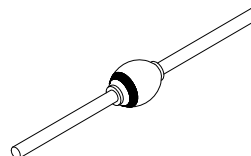
$\frac{4}{I_F} = I_O$; Max. forward voltage measured with instantaneous forward pulse of 300 μ sec minimum.

5/ Max. Lead/End Tab temp. for soldering is 250°C, 3/8" from case for 5 sec maximum.

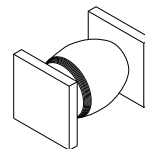
6/ Operating and storage temperature: -65°C to +175°C.

7/ Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR=.25A, TA=25°C.

Axial



Surface Mount Square Tab



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

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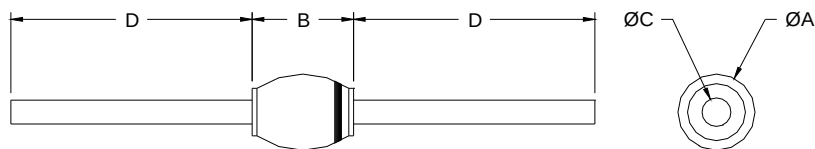


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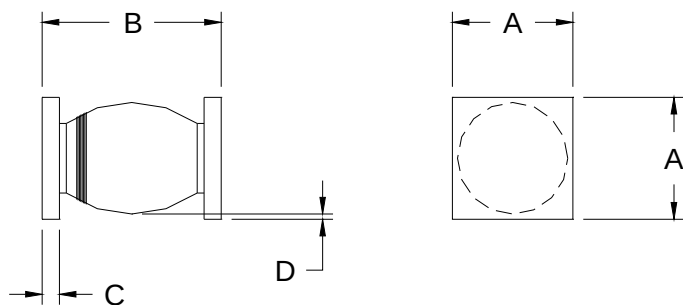
SUM8.2F & FSMS

PACKAGE OUTLINE: Axial



DIMENSIONS		
DIM	MIN	MAX
A	.065"	0.165"
B	---	.350"
C	0.047"	0.053"
D	1.00"	—

PACKAGE OUTLINE: Surface Mount Square Tab



DIMENSIONS		
DIM	MIN	MAX
A	0.170"	0.180"
B	0.330"	0.380"
C	0.020"	0.030"
D	0.002"	—

Notes:

Consult manufacturing for operating curves.

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