



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
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SRJ20UF thru SRJ35UF Series

**1.5 AMP
2,000 - 3,500 VOLTS
ULTRAFAST RECOVERY
HIGH VOLTAGE RECTIFIER**

Designer's Data Sheet

Part Number / Ordering Information ^{1/}

SRJ **UF**

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

Package
= Axial
SMS = Surface Mount Square Tab

Recovery Time
UF = Ultrafast

Voltage
20 = 2,000 V
25 = 2,500 V
30 = 3,000 V
35 = 3,500 V

FEATURES:

- Ultrafast Recovery: 60 nsec Maximum
- PIV to 3.5 KV
- Hermetically Sealed Axial and Surface Mount Package
- High Temperature Category I Eutectic Metallurgical Bond
- Excellent Thermal Shock Performance
- For Use in High Voltage Systems
- 175°C Maximum Operating Temperature
- Smaller-Sized Replacement for 1N6512 thru 1N6515 and 1N6520 thru 1N6523 in Many Applications
- TX, TXV, and Space Level Screening Available^{2/}
- Available in a Hyper Fast Version. Contact Factory.

ELECTRICAL CHARACTERISTICS

Part Number	Peak Inverse Voltage	Average Rectifier Current		Maximum Reverse Current		Maximum Forward Voltage	Maximum Surge Current (see note 8)	Maximum Reverse Recovery Time	Maximum Junction Capacitance	Typical Thermal Resistance	
Symbol	PIV	I _O		I _R		V _F	I _{FSM}	t _{RR}	C _J	R _{θJE}	R _{θJL}
Units		A		μA		Volts	Amps	nsec	pF	°C/W	
Conditions	Volts	25°C	100°C	25°C	100°C	25°C	25°C	25°C	VR = 100 V f _T = 1 MHz		L = 1/8"
SRJ20UF	2000	1.5	1.0	0.5	15	4.5	60	60	10	4	8
SRJ25UF	2500	1.5	1.0	0.5	15	4.5	60	60	10	4	8
SRJ30UF	3000	1.5	1.0	0.5	15	4.5	60	60	10	4	8
SRJ35UF	3500	1.5	1.0	0.5	15	4.5	60	60	10	4	8

^{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/} I_F = I_O; Max. forward voltage measured with instantaneous forward pulse of 300μsec minimum.

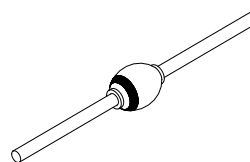
^{5/} Max. Lead/End Tab temp. for soldering is 250°C, 3/8" from case for 5 sec maximum.

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

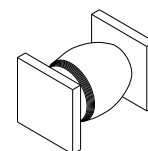
^{7/} Reverse recovery test conditions: I_F = 0.5 A, I_R = 1.0 A, I_{RR} = .25 A, T_A = 25°C.

^{8/} Surge at 8.3 msec pulse, half-sine wave.

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.

DATA SHEET #: RC0224A

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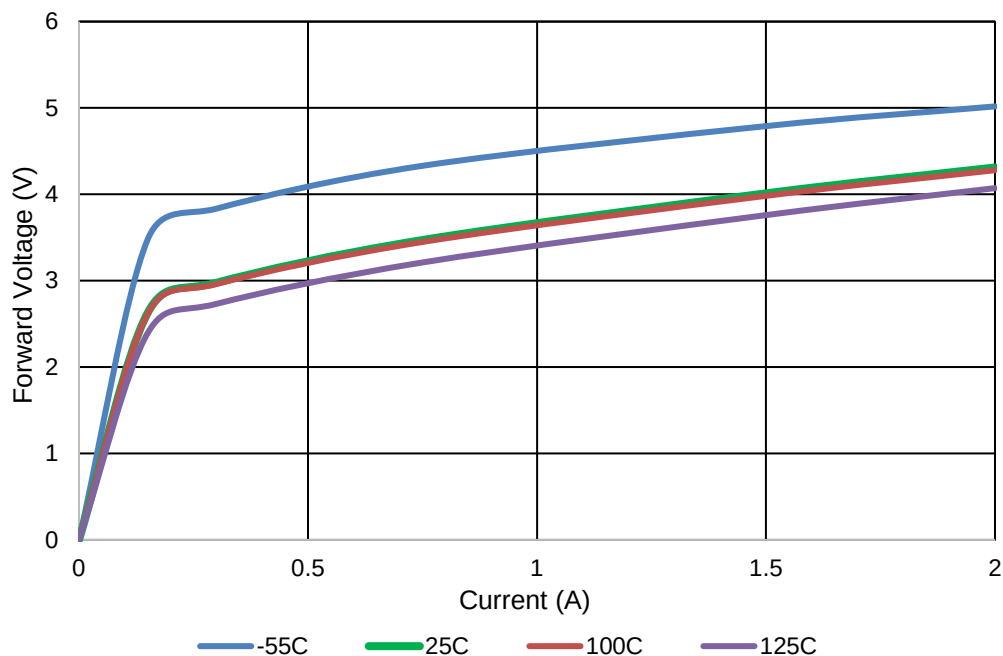
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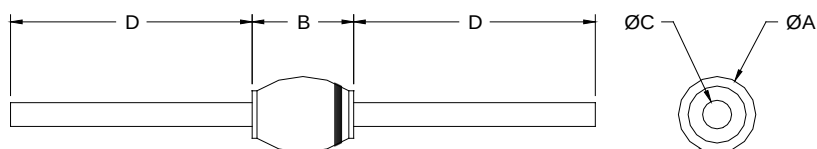
SRJ20UF thru SRJ35UF Series

SRJ35UF

Typical VF

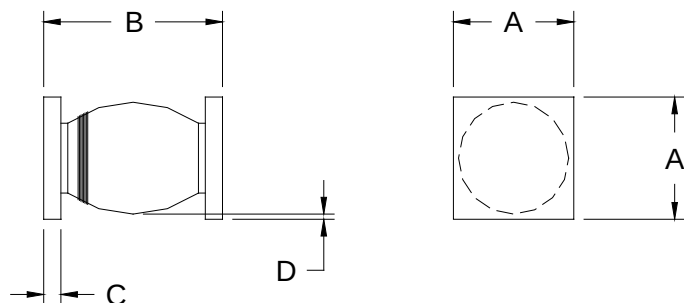


PACKAGE OUTLINE: Axial



DIMENSIONS		
DIM	MIN	MAX
A	—	0.165"
B	0.175"	0.215
C	0.038"	0.042"
D	1.00"	—

PACKAGE OUTLINE: Surface Mount Square Tab (SMS)



DIMENSIONS		
DIM	MIN	MAX
A	0.170"	0.180"
B	0.215"	0.275"
C	0.020"	0.030"
D	0.002"	—

Notes:

Consult manufacturing for operating curves.

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