

**SPD805SMS
 thru
 SPD830SMS**

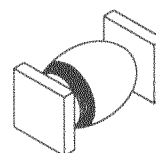
Designer's Data Sheet

FEATURES:

- Hyper Fast Recovery: 40 nsec Maximum
- PIV to 300 Volts
- Low Forward Voltage Drop
- Square Tab Surface Mount Package
- Hermetically Sealed
- Void Free Construction
- For High Efficiency Applications
- Replaces 1N5811 types
- TX, TXV and Space Level Screening available

**8 AMP
 50-300 VOLTS
 40 nsec
 HYPER FAST
 RECTIFIER**

**SURFACE MOUNT
 SQUARE TAB**



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SPD805SMS SPD810SMS SPD820SMS SPD830SMS	VRRM VRWM VR	50 100 200 300	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	8	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow junction to reach equilibrium between pulses, TA=25°C)	IFSM	125	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to End Tab	RθJE	12	°C/W

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

DATA SHEET#: RH0093 A

RMD

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PRELIMINARY



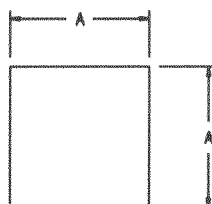
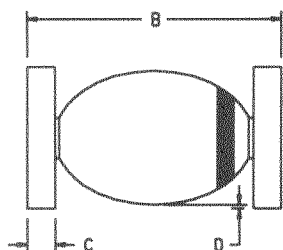
SOLID STATE DEVICES, INC

14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 8 Adc, TA=25°C, 300μs Pulse)	VF	0.98	Vdc
Instantaneous Forward Voltage Drop (IF =8 Adc, TA= - 55°C, 300μs Pulse)	VF	1.08	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300μs pulse minimum)	IR	20	μA
Reverse Leakage Current (Rated VR, TA=100°C, 300μs pulse minimum)	IR	1	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	100	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	40	nsec

CASE OUTLINE:



DIMENSIONS		
DIM	MIN.	MAX.
A	.172"	.180"
B	.220"	.290"
C	.020"	.035"
D	.002"	—

TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

