



PRELIMINARY

SOLID STATE DEVICES, INC

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

**SPD805SMS
thru
SPD830SMS**

Designer's Data Sheet

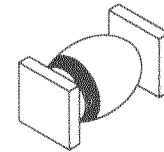
FEATURES:

- 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	50
		VRWM	100
			200
		VR	300
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

SPD805SMS thru SPD830SMS

PRELIMINARY



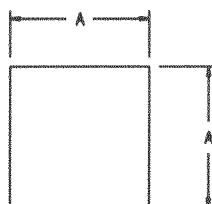
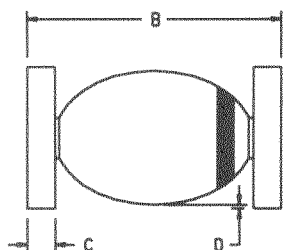
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ELECTRICAL CHARACTERISTICS

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

