

**SPD805SMS  
 thru  
 SPD830SMS**

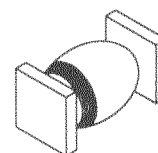
**Designer's Data Sheet**

**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**

# SPD805SMS thru SPD830SMS

PRELIMINARY



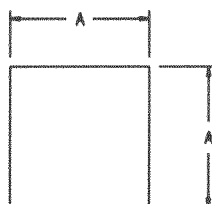
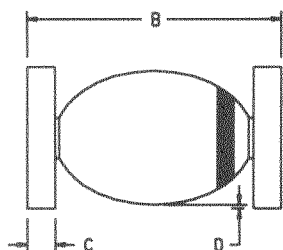
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## ELECTRICAL CHARACTERISTICS

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

