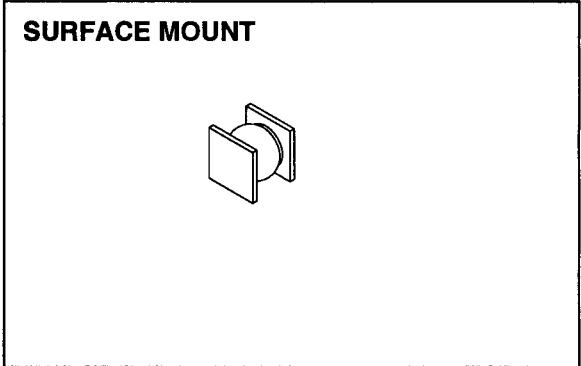


**SRM1HFSMS
 thru
 SRM2HFSMS**

Designer's Data Sheet

**20 AMP
 100-200 VOLTS
 40 nsec
 HYPER FAST
 RECTIFIER**

- FEATURES:**
- Replaces D0-4 and D0-5 (1N5816, 1N6306)
 - High Current Version of 1N5811
 - Hyper Fast Recovery
 - PIV to 200 Volts
 - Low Reverse Leakage Current
 - Hermetically Sealed Void-Free Construction *
 - Monolithic Single Chip Construction
 - High Surge Rating
 - Low Thermal Resistance
 - Available in Axial Lead Versions
 - Equivalent to 1N6686US-1N6687US
 - TX, TXV, and Space Level Screening Available



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	SRM1HFSMS	VRRM	100
	SRM2HFSMS	VRWM	200
		VR	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	Io	20	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	375	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to End Tab	RθJE	3.5	°C/W

* PIND Testing not required on Void Free devices per MIL-S-19500

SRM1HFSMS thru SRM2HFSMS

PRELIMINARY



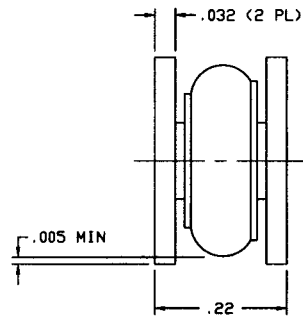
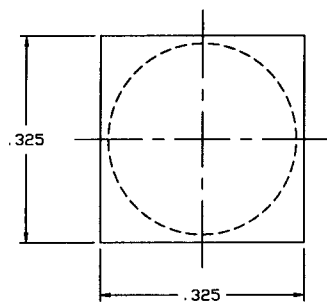
SOLID STATE DEVICES, INC

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Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 20 Adc, TA=25°C, 300µs Pulse)	VF	0.875	Vdc
Instantaneous Forward Voltage Drop (IF = 20 Adc, TA= - 65°C, 300µs Pulse)	VF	1.15	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	50	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	10	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	350	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	40	nsec

CASE OUTLINE: SURFACE MOUNT SQUARE TAB



TOLERANCES
(UNLESS SPECIFIED)
.XX ±.03
.XXX ±.010

CATHODE INDICATED BY DOT

TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

