



PRELIMINARY

SOLID STATE DEVICES, INC

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

**1N3899
thru
1N3903**

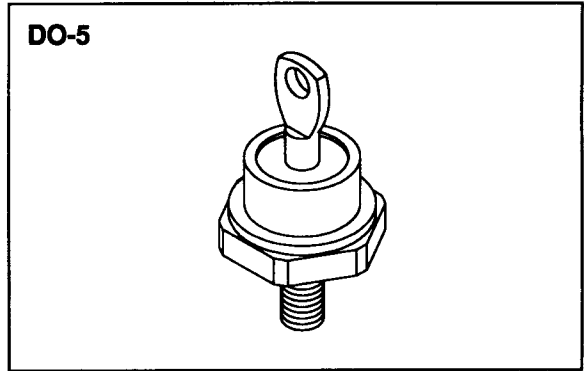
Designer's Data Sheet

FEATURES:

- Fast Recovery: 120 nsec maximum
- PIV to 400 Volts
- Higher Voltage devices available
- Low Reverse Leakage Current
- Hermetically Sealed
- Single Chip Construction
- High Surge Rating
- Low Thermal Resistance
- For Reverse Polarity add suffix "R"

- TX, TXV, and Space Level Screening

**20 AMPS
50-400 VOLTS
120 nsec
FAST RECOVERY
RECTIFIER**



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	1N3899	50	Volts
	1N3900	100	
	1N3901	200	
	1N3902	300	
	1N3903	400	
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, TA=25°C)	IFSM	250	Amps
Operating and storage temperature	Top & Tstg	-65 to +150	°C
Maximum Thermal Resistance Junction to Case	RθJC	1.8	°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#: RF0005 A

RMD

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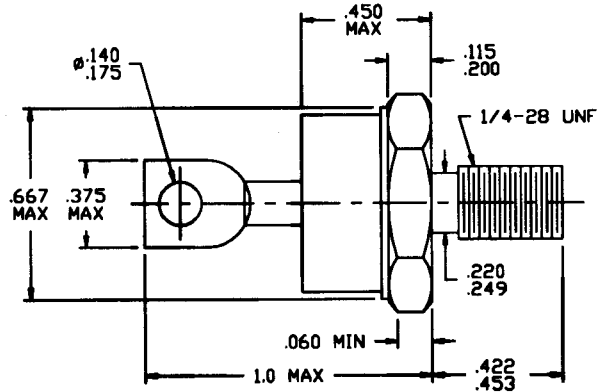
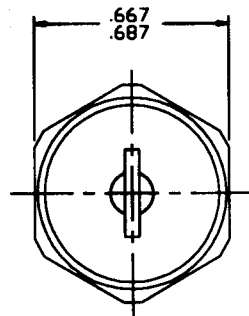
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 20 Adc, TA=25°C, 300µs Pulse)	VF	1.40	Vdc
Instantaneous Forward Voltage Drop (IF = 20 Adc, TA= - 55°C, 300µs Pulse)	VF	1.55	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	25	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	2.5	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	300	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	120	nsec

CASE OUTLINE: DO-5



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

