

**SDR900
 thru
 SDR905**

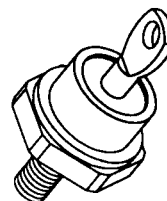
Designer's Data Sheet

FEATURES:

- Ultra Fast Recovery: 50 nsec Maximum
- Low Reverse Leakage
- Hermetically Sealed
- High Surge Current
- Single Chip Construction
- Available in isolated package
- For High Efficiency Applications
- TX, TXV and Space Level Screening Available

**30 AMP
 50-500 VOLTS
 50 nsec
 ULTRA FAST
 RECTIFIER**

DO-5



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage			
SDR900	VRRM	50	Volts
SDR901		100	
SDR902	VRWM	200	
SDR903		300	
SDR904	VR	400	
SDR905		500	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	30	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	350	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Case	RθJC	1.0	°C/W

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

DATA SHEET #: RU0025 A

RMD

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PRELIMINARY



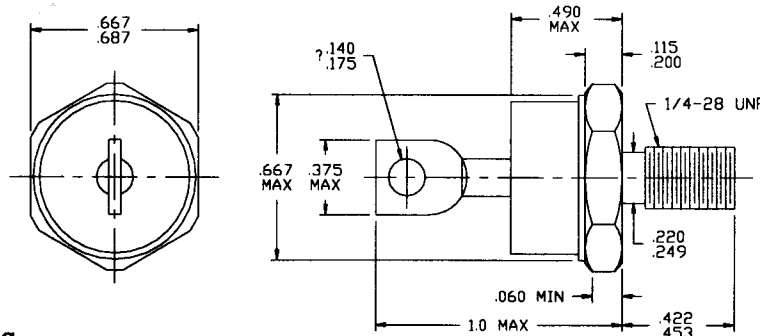
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 30 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse)	VF	1.45	Vdc
Instantaneous Forward Voltage Drop ($I_F = 30 \text{ Adc}$, $T_A = -55^\circ\text{C}$, 300 μs Pulse)	VF	1.6	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)	IR	50	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs pulse minimum)	IR	10	mA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)	CJ	250	pf
Reverse Recovery Time ($I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$, $T_A = 25^\circ\text{C}$)	trr	50	nsec

CASE OUTLINE: DO-5



Dimensions prior to solder dipping.

TYPICAL OPERATING CURVES

$T_A = 25^\circ\text{C}$ Unless otherwise specified

