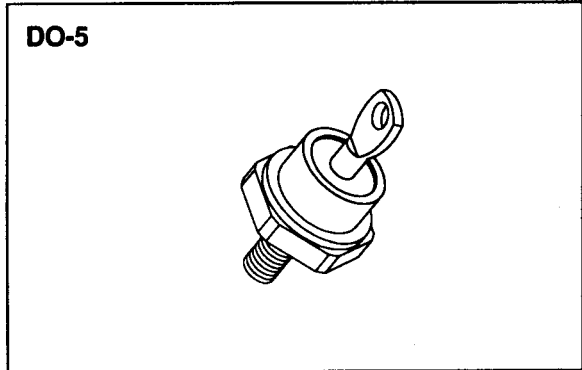


**SDR900
 thru
 SDR905**

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**



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	SDR900	50	Volts
	SDR901	100	
	SDR902	200	
	SDR903	300	
	SDR904	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

SDR900 thru SDR905

PRELIMINARY



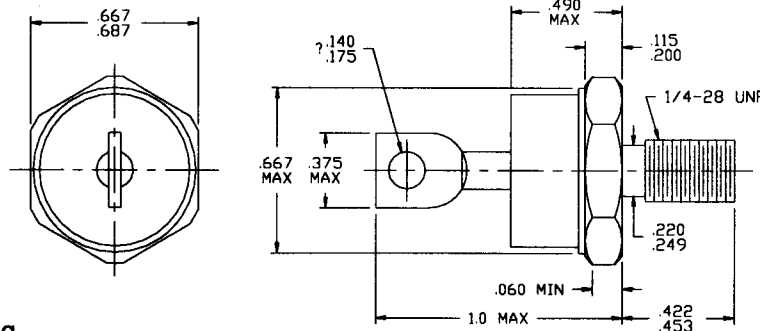
SOLID STATE DEVICES, INC

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

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



TYPICAL OPERATING CURVES

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

