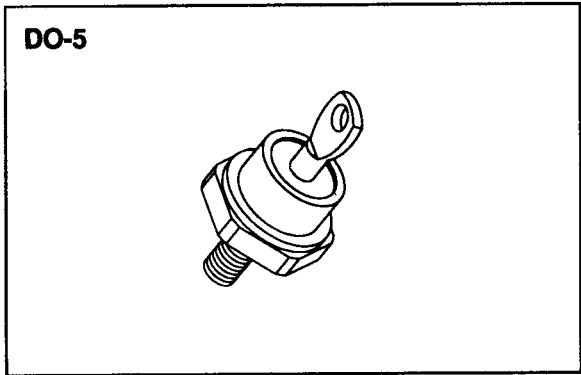


**SDR705
 thru
 SDR720**

Designer's Data Sheet

**70 AMP
 50-200 VOLTS
 50 nsec
 ULTRA FAST
 RECTIFIER**

- FEATURES:**
- Ultra Fast Recovery: 50 nsec Maximum
 - Low Forward Voltage Drop
 - Low Reverse Leakage
 - High Surge Current Capability
 - Hermetically Sealed
 - Single Chip Construction
 - For High Efficiency Applications
 - TX, TXV and Space Level Screening Available



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM	50	Volts
SDR705	VRWM	100	
SDR710	VR	150	
SDR715		200	
SDR720			
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	Io	70	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	750	Amps
Operating and storage temperature	Top & Tstg	-55 to +175	°C
Maximum Thermal Resistance Junction to Case	RθJC	1.0	°C/W

SDR705 thru SDR720

PRELIMINARY



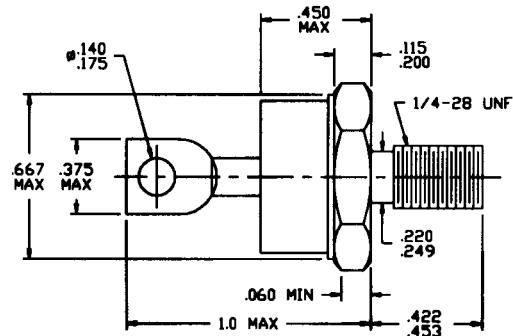
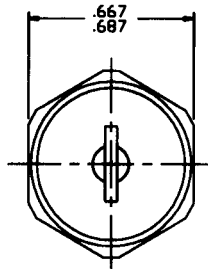
SOLID STATE DEVICES, INC

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

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 70 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse)	VF	0.975	Vdc
Instantaneous Forward Voltage Drop ($I_F = 70 \text{ Adc}$, $T_A = -55^\circ\text{C}$, 300 μs Pulse)	VF	1.075	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)	IR	25	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs pulse minimum)	IR	6	mA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)	CJ	700	pf
Reverse Recovery Time ($I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$, $T_A = 25^\circ\text{C}$)	t _{rr}	50	nsec

CASE OUTLINE: DO-5



Dimensions prior to solder dipping.

TYPICAL OPERATING CURVES

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

