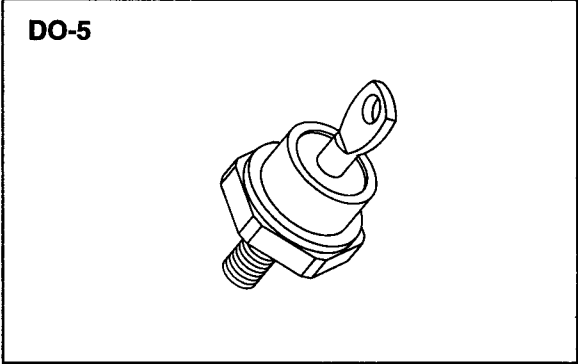


**5R6S
 thru
 15R6S**

Designer's Data Sheet

**50 AMP
 50-150 VOLTS
 50nsec
 EPION®
 RECTIFIER**

- FEATURES:**
- Radiation Tolerant
 - Ultra Fast Recovery: 50 nsec Maximum
 - Reverse Voltage to 150 Volts
 - Very Low Forward Voltage Drop
 - Low Reverse Leakage
 - Hermetically Sealed
 - Single Chip Construction
 - 175°C Operating



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage 5R6S 7R6S 10R6S 12R6S 15R6S	VRM(rep) VR	50 70 100 125 150	Volts
Half Wave Rectified Forward Current, Averaged Over Full Cycle (Resistive Load 60Hz, Sine Wave, TC=55°C)	IO	50	Amps
Peak Repetitive Forward Current (TC=55°C, 8.3 ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)	IFM(rep)	150	Amps
Peak Surge Current (TC=55°C, Superimposed on Rated Current at Rated Voltage, 8.3 ms Pulse)	IFM(surge)	450	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Case	RθJC	1.0	°C/W

**5R6S
thru
15R6S**

PRELIMINARY



SOLID STATE DEVICES, INC

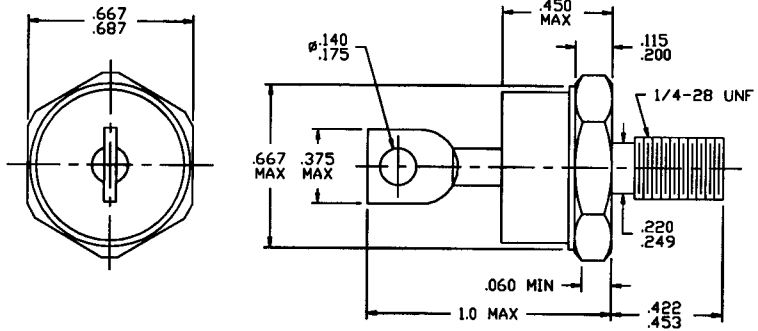
14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Maximum Instantaneous Forward Voltage Drop (IF = 50 Adc, TC=25°C, 300-500µs Pulse)	VF	0.95	Vdc
Maximum Instantaneous Forward Voltage Drop (IF = 50 Adc, TC= - 55°C, 300-500µs Pulse)	VF	1.05	Vdc
Maximum Reverse Leakage Current (Rated VR, TC=25°C)	IR	250*	µA
Maximum Reverse Leakage Current (Rated VR, TC=100°C)	IR	20*	mA
Maximum Junction Capacitance (VR = 10 Vdc, TA=25°C)	CJ	400	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA)	trr	50	nsec

* Lower Leakage Devices Available from Factory

CASE OUTLINE: DO-5



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

