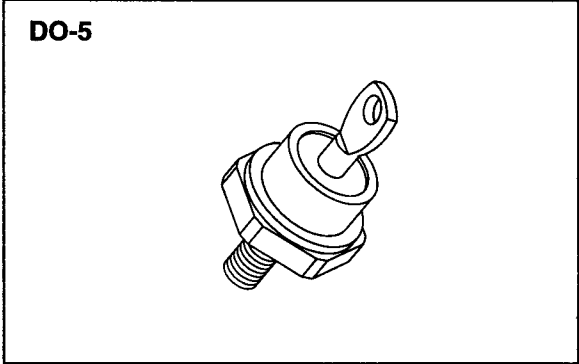


## Designer's Data Sheet

- 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

5R6S  
thru  
15R6S

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



## MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
<b>Peak Repetitive Reverse and DC Blocking Voltage</b>  <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;">                     5R6S 7R6S 10R6S 12R6S 15R6S                 </div> <div style="width: 30%; text-align: center;">                     VRM(rep)  VR                 </div> <div style="width: 20%; text-align: center;">                     50 70 100 125 150                 </div> <div style="width: 10%; text-align: center; vertical-align: middle;">Volts</div> </div>			
<b>Half Wave Rectified Forward Current, Averaged Over Full Cycle</b> (Resistive Load 60Hz, Sine Wave, TC=55°C)	<b>IO</b>	50	Amps
<b>Peak Repetitive Forward Current</b> (TC=55°C, 8.3 ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)	<b>IFM(rep)</b>	150	Amps
<b>Peak Surge Current</b> (TC=55°C, Superimposed on Rated Current at Rated Voltage, 8.3 ms Pulse)	<b>IFM(surge)</b>	450	Amps
<b>Operating and storage temperature</b>	<b>Top &amp; Tstg</b>	-65 to +175	°C
<b>Maximum Thermal Resistance</b> Junction to Case	<b>RθJC</b>	1.0	°C/W

**5R6S  
thru  
15R6S**

PRELIMINARY



**SOLID STATE DEVICES, INC**

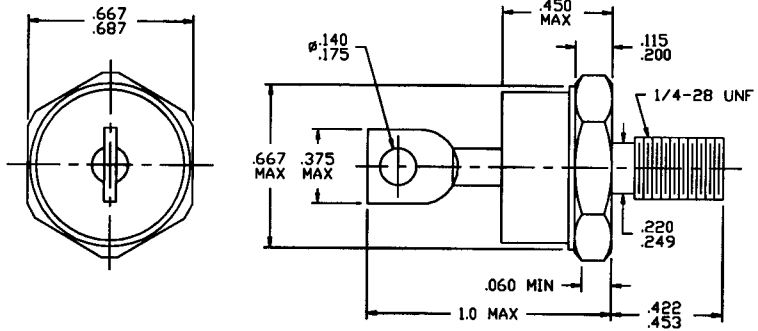
14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

**ELECTRICAL CHARACTERISTICS**

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Maximum Instantaneous Forward Voltage Drop (IF = 50 Adc, TC=25°C, 300-500µs Pulse)	V <sub>F</sub>	0.95	V <sub>dc</sub>
Maximum Instantaneous Forward Voltage Drop (IF = 50 Adc, TC= - 55°C, 300-500µs Pulse)	V <sub>F</sub>	1.05	V <sub>dc</sub>
Maximum Reverse Leakage Current (Rated V <sub>R</sub> , TC=25°C)	I <sub>R</sub>	250*	µA
Maximum Reverse Leakage Current (Rated V <sub>R</sub> , TC=100°C)	I <sub>R</sub>	20*	mA
Maximum Junction Capacitance (V <sub>R</sub> = 10 V <sub>dc</sub> , T <sub>A</sub> =25°C)	C <sub>J</sub>	400	pf
Reverse Recovery Time (IF=500mA, I <sub>R</sub> =1 A, IRR=250mA)	t <sub>rr</sub>	50	nsec

\* Lower Leakage Devices Available from Factory

**CASE OUTLINE: DO-5**



**TYPICAL OPERATING CURVES**

TA=25°C Unless otherwise specified

