



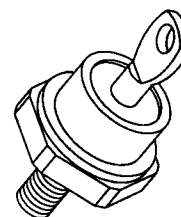
PRELIMINARY

SOLID STATE DEVICES, INC14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

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
EPID[®]
RECTIFIER****DO-5**

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

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.**DATA SHEET#: RU0165 C****MED**

**5R6S
thru
15R6S**

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SSDI
SOLID STATE DEVICES, INC

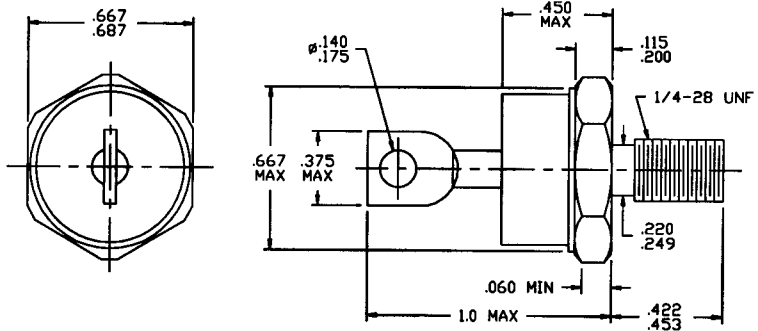
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Maximum Instantaneous Forward Voltage Drop ($I_F = 50 \text{ Adc}$, $T_C = 25^\circ\text{C}$, 300-500 μs Pulse)	V_F	0.95	Vdc
Maximum Instantaneous Forward Voltage Drop ($I_F = 50 \text{ Adc}$, $T_C = -55^\circ\text{C}$, 300-500 μs Pulse)	V_F	1.05	Vdc
Maximum Reverse Leakage Current (Rated V_R , $T_C = 25^\circ\text{C}$)	I_R	250*	μA
Maximum Reverse Leakage Current (Rated V_R , $T_C = 100^\circ\text{C}$)	I_R	20*	mA
Maximum Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$)	C_J	400	pf
Reverse Recovery Time ($I_F = 500\text{mA}$, $I_R = 1 \text{ A}$, $I_{RR} = 250\text{mA}$)	t_{rr}	50	nsec

* Lower Leakage Devices Available from Factory

CASE OUTLINE: DO-5



TYPICAL OPERATING CURVES

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

