



PRELIMINARY

## SOLID STATE DEVICES, INC

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

### Designer's Data Sheet

#### FEATURES:

- I.A.W. DESC drawing 90097
- Fast Recovery: 5  $\mu$ sec maximum
- PIV to 600 Volts
- Low Reverse Leakage Current
- Hermetically Sealed Ministud package
- Single Chip Construction
- High Surge Rating
- Low Thermal Resistance
  
- TX, TXV, and Space Level Screening available



**90097-1  
thru  
90097-3**

**9 AMP  
200-600 VOLTS  
5  $\mu$ sec  
STANDARD RECOVERY  
RECTIFIER**

**ISOLATED MINISTUD "V"**



#### MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
<b>Peak Repetitive Reverse and DC Blocking Voltage</b>  90097-1 90097-2 90097-3	VRRM  VRWM  VR	  200 400 600	Volts
<b>Average Rectified Forward Current</b> (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	9	Amps
<b>Peak Surge Current</b> (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	150	Amps
<b>Operating and storage temperature</b>	Top & Tstg	-65 to +175	°C
<b>Maximum Thermal Resistance</b> Junction to Case	R $\theta$ JE	7.5	°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#: R00015 A**

**RMD**

90097-1  
thru  
90097-3

PRELIMINARY

**SSDI**

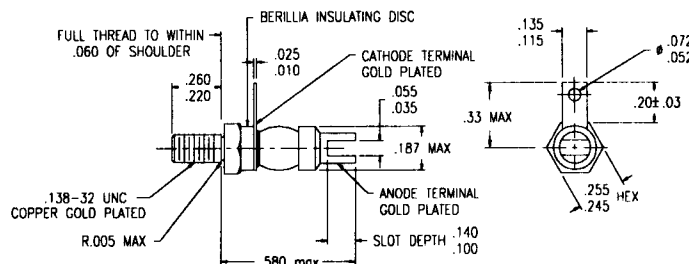
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## ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> (IF = 6 Adc, TA=25°C, 300μs Pulse) (IF = 9 Adc, TA=25°C, 300μs Pulse)	<b>VF</b>	1.0 1.2	<b>Vdc</b>
<b>Instantaneous Forward Voltage Drop</b> (IF = 9 Adc, TA= - 55°C, 300μs Pulse)	<b>VF</b>	1.4	<b>Vdc</b>
<b>Reverse Leakage Current</b> (Rated VR, TA=25°C, 300μs pulse minimum)	<b>IR</b>	10	<b>μA</b>
<b>Reverse Leakage Current</b> (Rated VR, TA=100°C, 300μs pulse minimum)	<b>IR</b>	300	<b>μA</b>
<b>Junction Capacitance</b> (VR = 10 Vdc, TA=25°C, f= 1 MHz )	<b>CJ</b>	40	<b>pf</b>
<b>Reverse Recovery Time</b> (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	<b>trr</b>	5	<b>μsec</b>

## CASE OUTLINE: ISOLATED MINISTUD "V"



## TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

