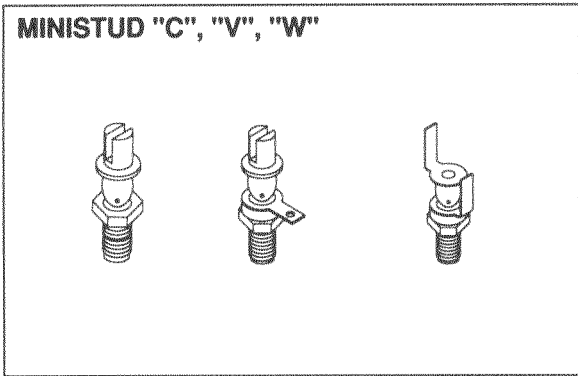


**SDR4405  
 thru  
 SDR4432**

**Designer's Data Sheet**

**10 AMP  
 50-300 VOLTS  
 40 nsec  
 HYPER FAST  
 RECTIFIER**

- FEATURES:**
- Hyper Fast Recovery: 40 nsec Maximum
  - PIV to 300 Volts
  - Mini 4-40 UNC Stud package
  - Hermetically Sealed
  - Void Free Construction
  - For High Efficiency Applications
  - Replaces 1N5811 types
  
  - TX, TXV and Space Level Screening available



**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
<b>Peak Repetitive Reverse                      and DC Blocking Voltage</b>  SDR4405(C), SDR4406(V), SDR4407(W) SDR4410(C), SDR4411(V), SDR4412(W) SDR4420(C), SDR4421(V), SDR4422(W) SDR4430(C), SDR4431(V), SDR4432(W)	VRRM  VRWM  VR	50 100 200 300	Volts
<b>Average Rectified Forward Current</b> (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	10	Amps
<b>Peak Surge Current</b> (8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow junction to reach equilibrium between pulses, TA=25°C)	IFSM	125	Amps
<b>Operating and storage temperature</b>	Top & Tstg	-65 to +175	°C
<b>Maximum Thermal Resistance</b> Junction to Case	RθJC	7.5	°C/W

# SDR4405 thru SDR4432

PRELIMINARY



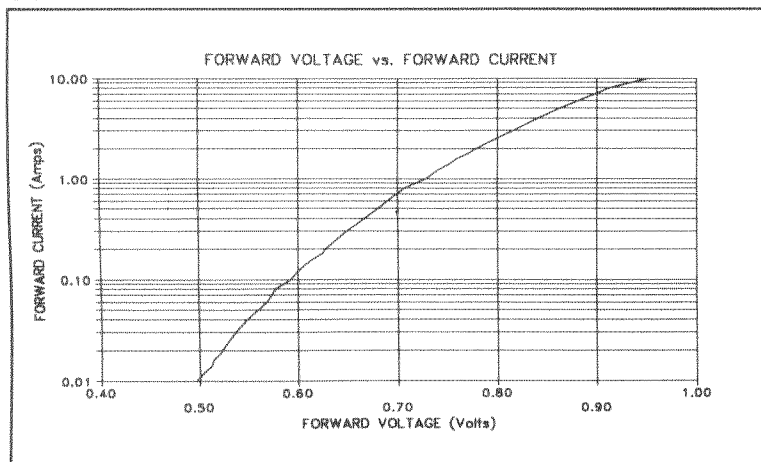
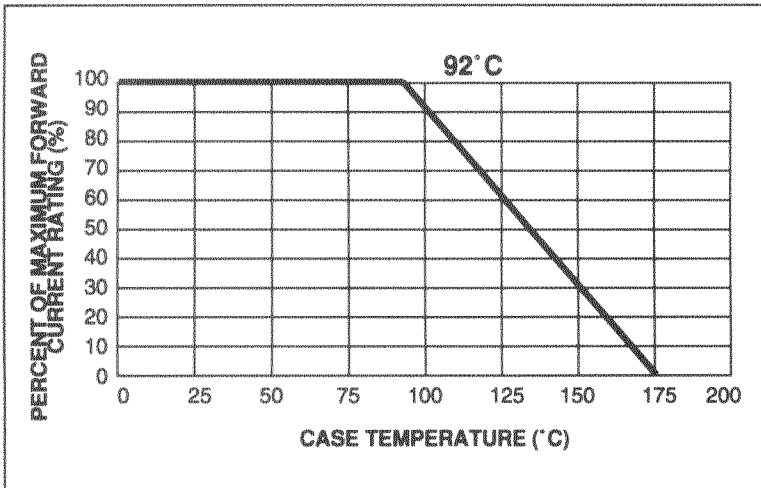
SOLID STATE DEVICES, INC

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

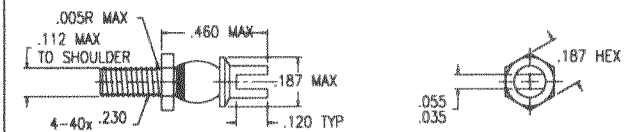
## ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA=25°C, 300µs Pulse)	VF	1.1	Vdc
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA= - 55°C, 300µs Pulse)	VF	1.2	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	20	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	1	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz )	CJ	100	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	t <sub>rr</sub>	40	nsec

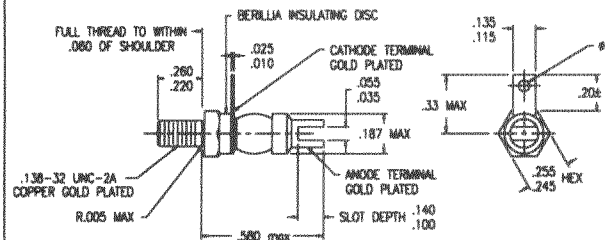
## TYPICAL OPERATING CURVES TA=25°C Unless otherwise specified



### MINISTUD "C"



### MINISTUD "V"



### MINISTUD "W"

