

Designer's Data Sheet

FEATURES:

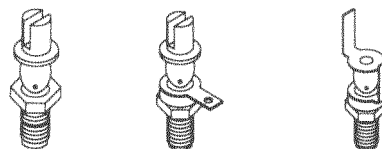
- Hyper Fast Recovery: 40 nsec Maximum
- PIV to 300 Volts
- Mini 4-40 UNC Stud package
- Hermetically Sealed
- Void Free Construction
- For High Efficiency Applications
- Replaces 1N5811 types

- TX, TXV and Space Level Screening available

**SDR4405
thru
SDR4432**

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

MINISTUD "C", "V", "W"



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage 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
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	10	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow junction to reach equilibrium between pulses, TA=25°C)	IFSM	125	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Case	RθJC	7.5	°C/W

SDR4405 thru SDR4432

PRELIMINARY

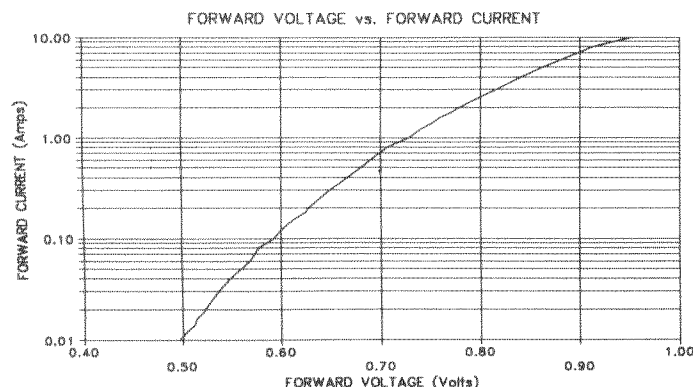
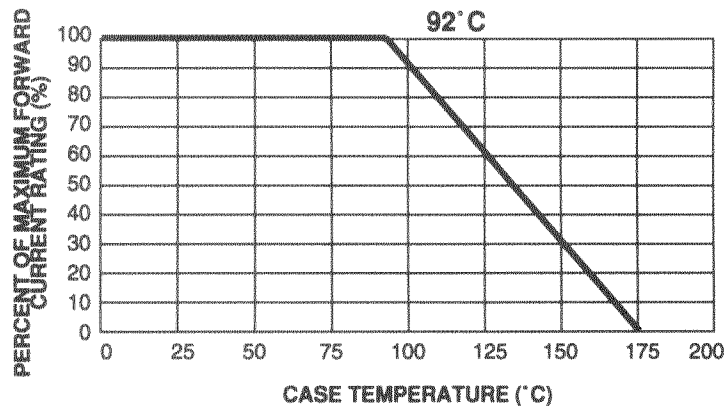
SSDI
SOLID STATE DEVICES, INC

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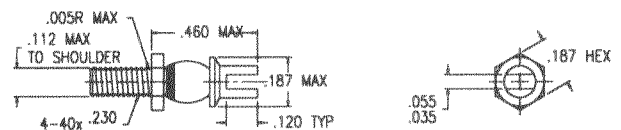
ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA=25°C, 300μs Pulse)	V _F	1.1	V _{dc}
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA= - 55°C, 300μs Pulse)	V _F	1.2	V _{dc}
Reverse Leakage Current (Rated VR, TA=25°C, 300μs pulse minimum)	I _R	20	μA
Reverse Leakage Current (Rated VR, TA=100°C, 300μs pulse minimum)	I _R	1	mA
Junction Capacitance (VR = 10 V _{dc} , TA=25°C, f= 1 MHz)	C _J	100	pf
Reverse Recovery Time (IF=500mA, I _R =1 A, IRR=250mA, TA=25°C)	t _{rr}	40	nsec

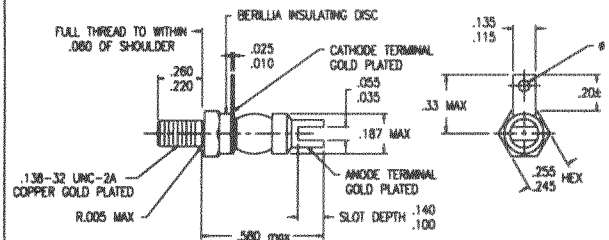
TYPICAL OPERATING CURVES TA=25°C Unless otherwise specified



MINISTUD "C"



MINISTUD "V"



MINISTUD "W"

