

Designer's Data Sheet

FEATURES:

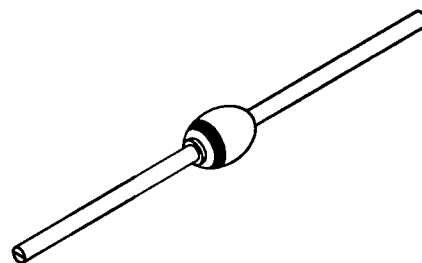
- Hyper Fast Recovery: 40 nsec Maximum
- PIV to 600 Volts
- Low Forward Voltage Drop
- Hermetically Sealed
- Void Free Construction
- For High Efficiency Applications
- Single Chip Construction

- TX, TXV and Space Level Screening available

**SPD502
thru
SPD506**

**5 AMP
200-600 VOLTS
40 nsec
HYPER FAST
RECTIFIER**

AXIAL



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage <div style="display: flex; justify-content: space-between;"> <div>SPD502</div> <div>VRRM</div> <div>200</div> <div rowspan="5">Volts</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SPD503</div> <div>VRWM</div> <div>300</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SPD504</div> <div></div> <div>400</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SPD505</div> <div></div> <div>500</div> </div> <div style="display: flex; justify-content: space-between;"> <div>SPD506</div> <div>VR</div> <div>600</div> </div>			
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	5	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	100	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Leads, L=3/8"	RθJL	15	°C/W

SPD502 thru SPD506

PRELIMINARY



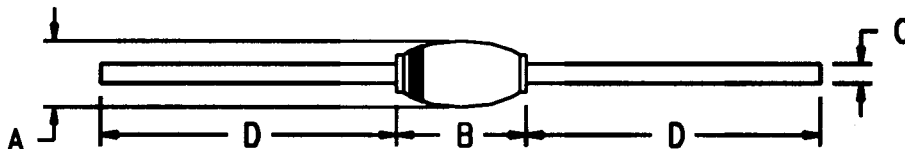
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 5 Adc, TA=25°C, 300μs Pulse)	VF	1.6	Vdc
Instantaneous Forward Voltage Drop (IF = 5 Adc, TA= - 55°C, 300μs Pulse)	VF	1.75	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300μs pulse minimum)	IR	10	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	50	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	40	nsec

CASE OUTLINE:



DIMENSIONS

DIM	MIN.	MAX.
A	.140"	.170"
B	.170"	.230"
C	.047"	.053"
D	1.00"	—

TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

