PRELIMINARY

SOLID STATE DEVICES, INC

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

SHF1402 thru SHF1406

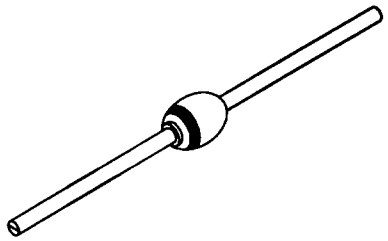
4 AMP 200-600 VOLTS 30 nsec HYPER FAST RECTIFIER

Designer's Data Sheet

FEATURES:

- Guaranteed High Temp. trr: 50nsec max
- Hyper Fast Recovery: 30 nsec Maximum
- PIV to 600 Volts
- Void Free Construction
- Hermetically Sealed
- Low Reverse Leakage Current
- For High Efficiency Applications
- Replaces 1N6626 Series where faster trr is required
- TX, TXV and Space Level Screening

AXIAL



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage **SHF1402** **SHF1403** **SHF1404** **SHF1405** **SHF1406**	V_{RRM} V_{RWM} V_R	200 300 400 500 600	**Volts**
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=55°C, L=3/8")	I_O	4	**Amps**
Surge Current (Single 8.3 ms Pulse, Half Sine Superimposed on Io, TA=55°C)	I_{FSM}	75	**Amps**
Repetitive Peak Surge Current (8.3 ms Pulse,allow junction to reach equilibrium between pulses, TA=55°C)	I_{FRM}	20	**Amps**
Operating and storage temperature	T_{op} & T_{stg}	-65 to +175	°C
Maximum Thermal Resistance Junction to leads (L=3/8")	$R_{\theta JL}$	20	°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 #: RH0023 A	RMD

SHF1402 thru SHF1406

PRELIMINARY

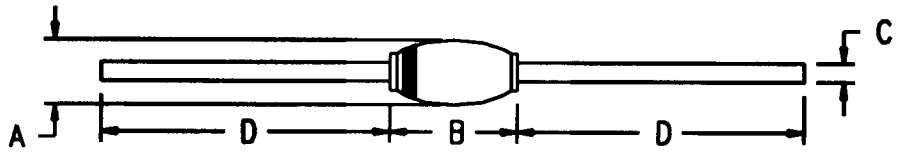
SOLID STATE DEVICES, INC

14849 Firestone Boulevard · La Mirada,CA 90
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-74

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (I_F = 3 Adc, T_A=25°C, 300µs Pulse)	V_F	1.5	Vdc
Instantaneous Forward Voltage Drop (I_F = 4 Adc, T_A=25°C, 300µs Pulse)	V_F	1.6	Vdc
Reverse Leakage Current (Rated VR, T_A=25°C, 300µs pulse minimum)	I_R	10	µA
Reverse Leakage Current (Rated V_R, T_A=100°C, 300µs pulse minimum)	I_R	1	mA
Junction Capacitance (V_R = 10 Vdc, T_A=25°C, f= 1 MHz)	CJ	50	pf
Reverse Recovery Time (I_F =500mA, I_R = 1A, I_{RR}=250mA, T_A=25°C) (I_F =500mA, I_R = 1A, I_{RR}=250mA, T_A=100°C)	trr	30 60	nsec

CASE OUTLINE:



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

TYPICAL OPERATING CURVES