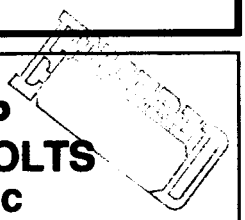
PRELIMINARY

SHF1402SMS thru SHF1406SMS

SOLID STATE DEVICES, INC

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

Designer's Data Sheet

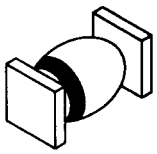


4 AMP
200-600 VOLTS
30 nsec
HYPER FAST
RECTIFIER

FEATURES:

- Hyper Fast Recovery: 30 nsec Maximum
- Guaranteed High Temp. trr: 60nsec max
- PIV to 600 Volts
- Void Free Construction
- Hermetically Sealed Surface Mount Package
- Low Reverse Leakage Current
- For High Efficiency Applications
- Replaces 1N6626 Series where faster trr is required
- TX, TXV and Space Level Screening available

SURFACE MOUNT
SQUARE TAB



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage **SHF1402SMS** **SHF1403SMS** **SHF1404SMS** **SHF1405SMS** **SHF1406SMS**	V_{RRM} V_{RWM} V_R	200 300 400 500 600	**Volts**
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=55°C)	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	**Top & Tstg**	-65 to +175	**°C**
Maximum Thermal Resistance Junction to End Tab	$R_{\theta JE}$	14	**°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 #: RH0083 A**	**RMD**

SHF1402SMS thru SHF1406SMS

PRELIMINARY

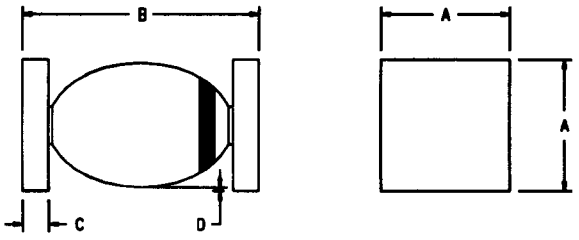
SOLID STATE DEVICES, INC

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 (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 prior to soldering

DIMENSIONS		
DIM	MIN.	MAX.
A	.172"	.180"
B	.220"	.270"
C	.022"	.028"
D	.002"	---

TYPICAL OPERATING CURVES