



PRELIMINARY

SOLID STATE DEVICES, INC

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

**SHF1100SM  
thru  
SHF1103SM**

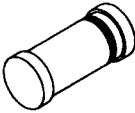
## Designer's Data Sheet

### FEATURES:

- Hyper Fast Recovery: 35 nsec Maximum
- PIV to 300 Volts
- Hermetically Sealed Surface Mount Package
- Void Free Construction
- For High Efficiency Applications
- Single Chip Construction
- Replaces UES1104 Types
  
- TX, TXV and Space Level Screening available

**1 AMP  
50-300 VOLTS  
35 nsec  
HYPER FAST  
RECTIFIER**

**SURFACE MOUNT  
ROUND TAB**



## MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
<b>Peak Repetitive Reverse and DC Blocking Voltage</b>	VRRM	50	Volts
	VRWM	100	
		200	
	VR	300	
<b>Average Rectified Forward Current</b> (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	1	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	20	Amps
<b>Operating and storage temperature</b>	Top & Tstg	-65 to +175	°C
<b>Maximum Thermal Resistance</b> Junction to End Tab	RθJE	28	°C/W

# SHF1100SM thru SHF1103SM

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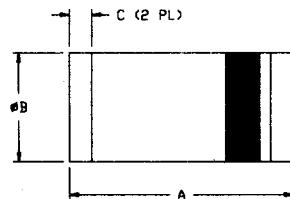
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## ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 1 Adc, TA=25°C, 300µs Pulse)	VF	1.35	Vdc
Instantaneous Forward Voltage Drop (IF = 1 Adc, TA= - 55°C, 300µs Pulse)	VF	1.5	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	20	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	35	nsec

## CASE OUTLINE:



## DIMENSIONS

DIM	MIN.	MAX.
A	.190"	.210"
B	.095"	.105"
C	.005"	.025"

## TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

