

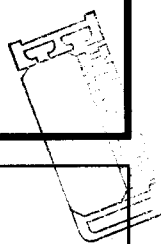


PRELIMINARY

SOLID STATE DEVICES, INC

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

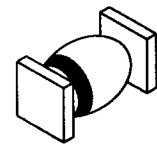
**SHM15SMS
thru
SHM100SMS**



Designer's Data Sheet

**100-250 mA
1500-10000 VOLTS
5 μsec
HIGH VOLTAGE
RECTIFIER**

**SURFACE MOUNT
SQUARE TAB**



FEATURES:

- Standard Recovery: 5μsec Maximum
- PIV to 10000 Volts
- Hermetically Sealed
- Void-Free Construction
- Metallurgically bonded
- 175°C Maximum Operating Temperature
- TX, TXV and Space Level Screening Available

ELECTRICAL CHARACTERISTICS

Part Number	Peak Inverse Voltage	Average Rectified Current		Maximum Reverse Current @ PIV		Maximum Forward Voltage @ 55°C IO	Maximum Surge Current 1 Cycle	Maximum Reverse Recovery Time	Maximum Junction Capacitance	Typical Thermal Impedance
SYMBOL	PIV	IO		IR		VF	IFSM	trr	CJ, fT=1MHz	θJE
UNITS	Volts	25°C mA	100°C mA	55°C μA	100°C μA	25°C Volts	25°C Amps	25°C μsec	@ 100 Volts pf	°C/W
SHM15SMS	1500	250	215	1.0	25	6	15	5	8	55
SHM20SMS	2000	250	215	1.0	25	6	15	5	8	55
SHM25SMS	2500	250	215	1.0	25	6	15	5	8	55
SHM30SMS	3000	150	130	1.0	25	10	10	5	4	55
SHM40SMS	4000	150	130	1.0	25	10	10	5	4	55
SHM50SMS	5000	150	130	1.0	25	10	10	5	4	55
SHM60SMS	6000	100	85	1.0	25	16	5	5	2	55
SHM80SMS	8000	100	85	1.0	25	16	5	5	2	55
SHM100SMS	10000	100	85	1.0	25	16	5	5	2	55

NOTES:

1. Operating and testing over 10,000 V/inch may require encapsulation or immersion in a suitable dielectric material.
2. Max. forward voltage measured with instantaneous forward pulse of 300μsec minimum.
3. Max. end tab temp. for soldering is 250°C for 5 sec maximum.
4. Operating and storage temperature: -65°C to +175°C
5. Reverse Recovery Test Conditions: IF=50mA, IR=100mA, IRR=25mA, TA=25°C

SHM15SMS thru SHM100SMS

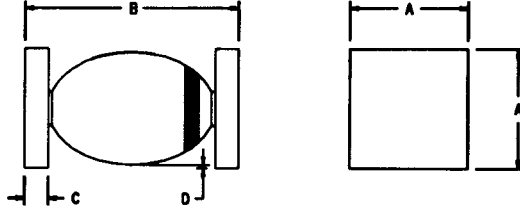
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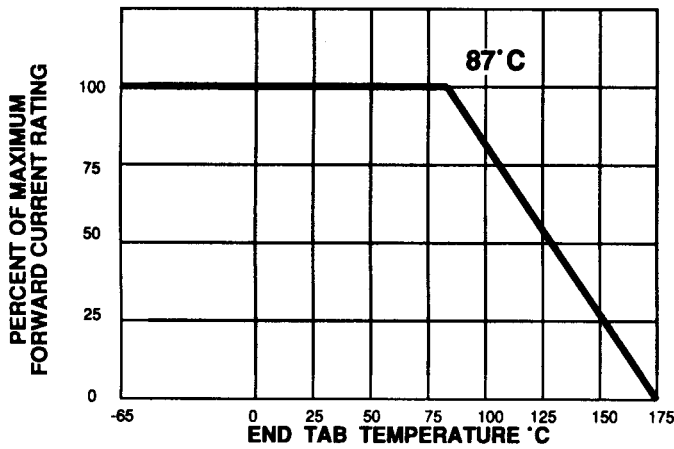
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PACKAGE OUTLINE:

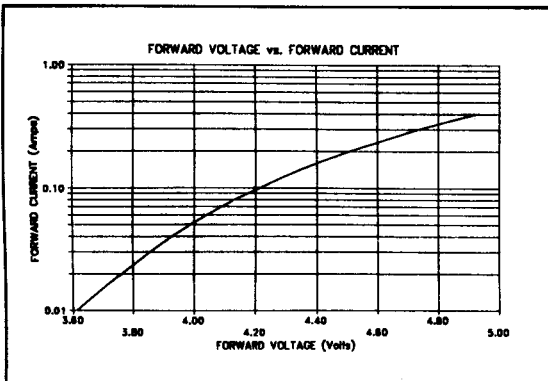
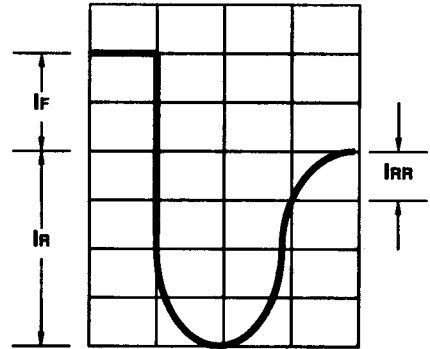


Part Number	DIM. A		DIM. B		DIM. C		DIM. D	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
SHM15-50SMS	.127"	.140"	.280"	.320"	.022"	.028"	.002"	---
SHM60-100SMS	.127"	.140"	.360"	.450"	.022"	.028"	.002"	---

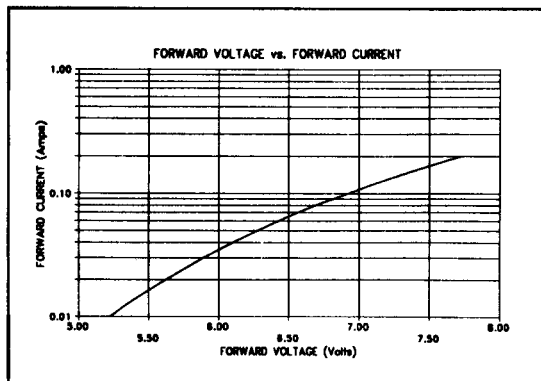
TYPICAL OPERATING CURVES



REVERSE RECOVERY WAVE FORM



SHM15SMS-SHM25SMS



SHM30SMS-SHM50SMS

For VF curves on SHM60SMS-SHM100SMS please contact SSDI.