



PRELIMINARY

SOLID STATE DEVICES, INC

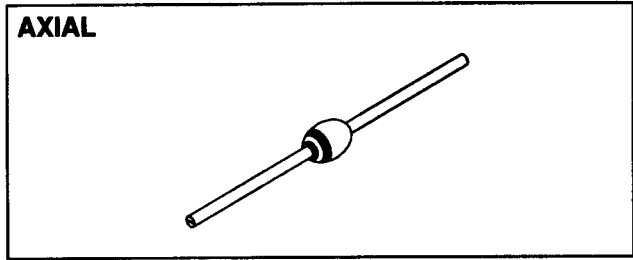
14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

Designer's Data Sheet

- 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

SHM15 thru SHM100

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



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	θJL
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	L= .25" °C/W
SHM15	1500	250	185	1.0	25	6	15	5	8	65
SHM20	2000	250	185	1.0	25	6	15	5	8	65
SHM25	2500	250	185	1.0	25	6	15	5	8	65
SHM30	3000	150	110	1.0	25	10	10	5	4	65
SHM40	4000	150	110	1.0	25	10	10	5	4	65
SHM50	5000	150	110	1.0	25	10	10	5	4	65
SHM60	6000	100	75	1.0	25	16	5	5	2	65
SHM80	8000	100	75	1.0	25	16	5	5	2	65
SHM100	10000	100	75	1.0	25	16	5	5	2	65

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. lead temp. for soldering is 250°C, 3/8" from the case 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

SHM15 thru SHM100

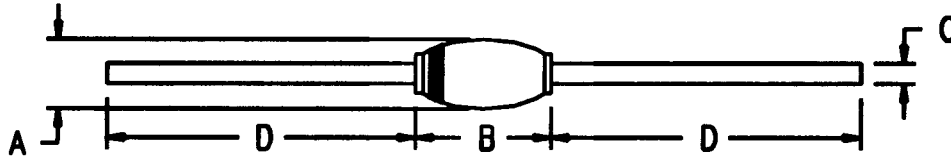
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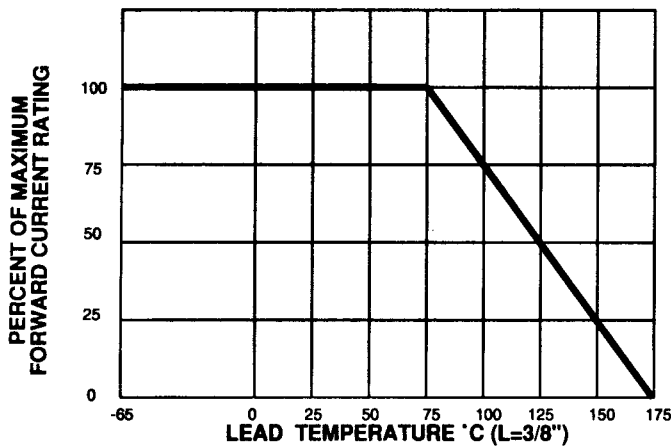
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PACKAGE OUTLINE:

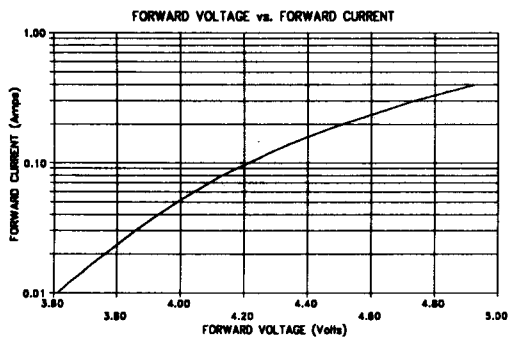
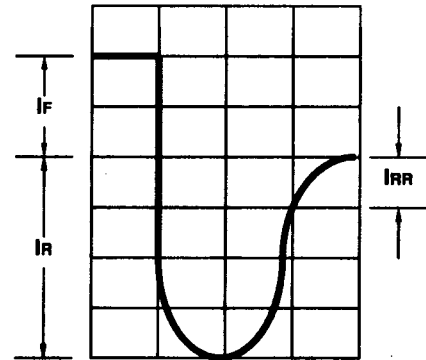


Part Number	DIM. A		DIM. B		DIM. C		DIM. D	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
SHM15-50	---	.140"	---	.300"	.025"	.033"	1.0"	---
SHM60-100	---	.140"	---	.400"	.025"	.033"	1.0"	---

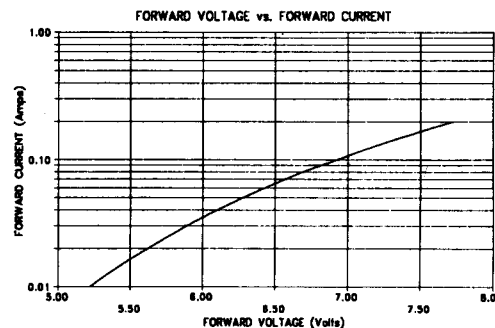
TYPICAL OPERATING CURVES



REVERSE RECOVERY WAVE FORM



SHM15-SHM25



SHM30-SHM50

For VF curves on SHM60-SHM100 please contact SSDI.