



## SK23L SERIES

### LOW VF SCHOTTKY RECTIFIER

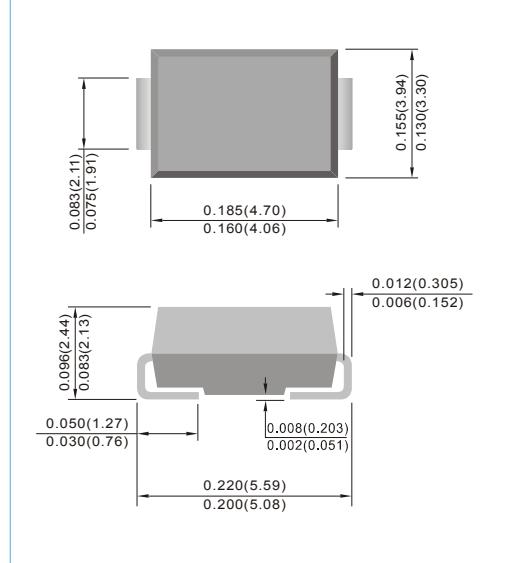
**VOLTAGE** 30 to 100 Volts    **CURRENT** 2.0 Amperes

**SMB / DO-214AA**

Unit : inch(mm)

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- IEC61000-4-2 ESD 15KV air, 8KV Contact Compliance
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)



#### MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0032 ounce, 0.092 gram

#### MAXIMUM RATINGS( $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	SK23L	SK24L	SK26L	S210L	UNIT		
Maximum repetitive peak reverse voltage	$V_{RRM}$	30	40	60	100	V		
Maximum rms voltage	$V_{RMS}$	21	28	42	70	V		
Maximum dc blocking voltage	$V_{DC}$	30	40	60	100	V		
Maximum average forward rectified current	$I_{F(AV)}$	2				A		
Maximum reverse current	$I_R$	250		150		$\mu\text{A}$		
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50				A		
Typical thermal resistance (Note 1)	$R_{\Theta JA}$ $R_{\Theta JL}$	115 20				$^\circ\text{C}/\text{W}$		
Operating junction temperature range	$T_J$	-55 to + 125		-55 to + 150		$^\circ\text{C}$		
Storage temperature range	$T_{STG}$	-55 to + 150				$^\circ\text{C}$		

Note: 1. Mounted on P.C.B with minimum pad layout.

#### ELECTRICAL CHARACTERISTICS( $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	SK23L / SK24L		SK26L		S210L		UNIT
			TYP.	MAX.	TYP.	MAX.	TYP.	MAX.	
Instantaneous forward voltage	$V_F$	$I_F=1\text{A}$ $T_A=25^\circ\text{C}$	0.37	-	0.40	-	0.53	-	V
		$I_F=2\text{A}$ $T_A=25^\circ\text{C}$	0.41	0.45	0.47	0.52	0.66	0.72	
		$I_F=1\text{A}$ $T_A=125^\circ\text{C}$	0.25	-	0.30	-	0.47	-	V
		$I_F=2\text{A}$ $T_A=125^\circ\text{C}$	0.30	-	0.41	-	0.56	-	



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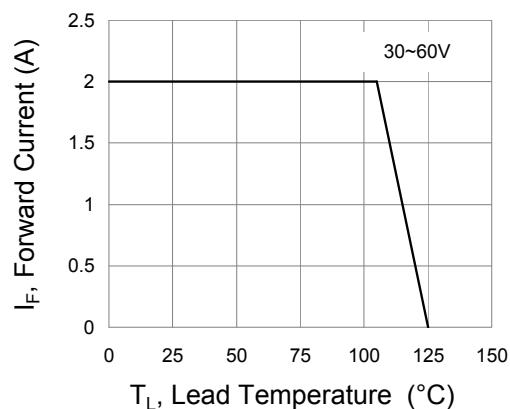


Fig.1 Forward Current Derating Curve

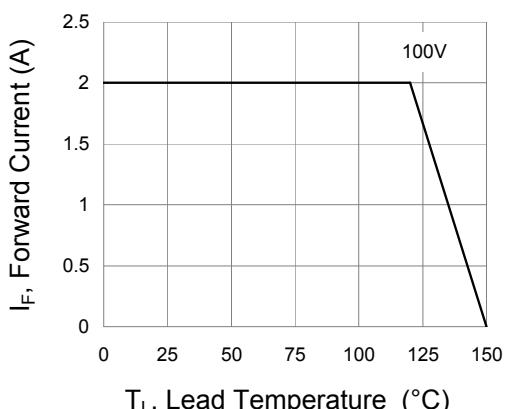


Fig.2 Typical Junction Capacitance

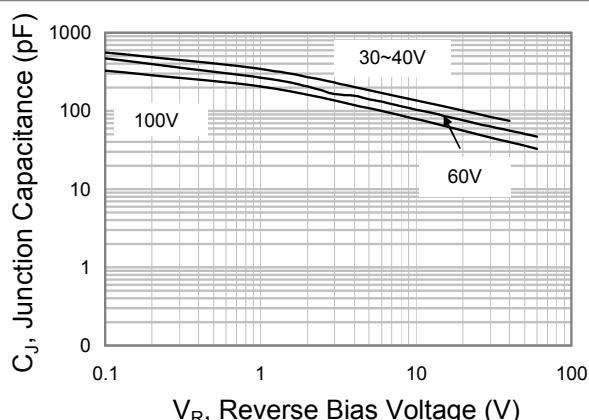


Fig.3 Typical Junction Capacitance

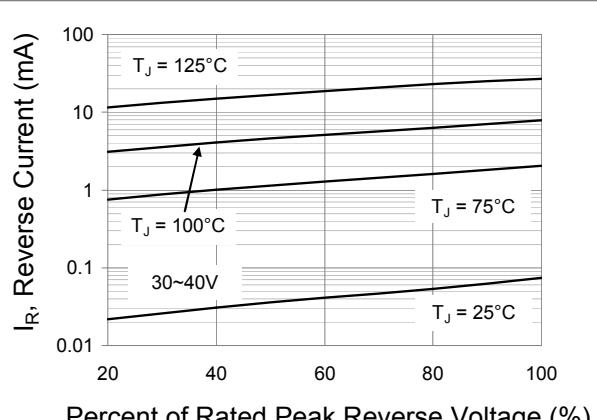


Fig.4 Typical Reverse Characteristics

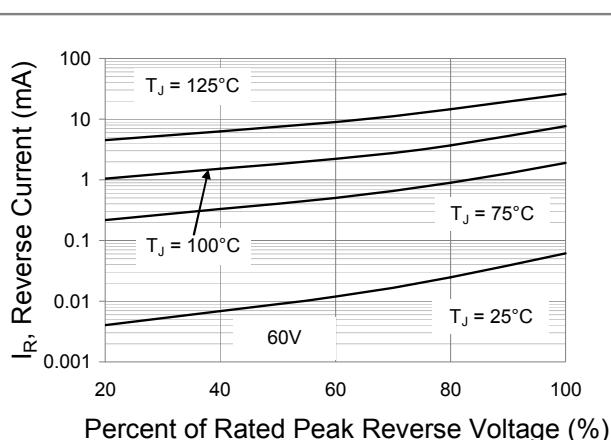


Fig.5 Typical Reverse Characteristics

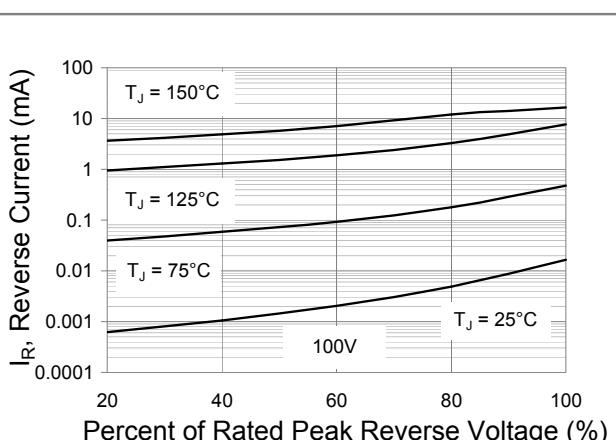


Fig.6 Typical Reverse Characteristics





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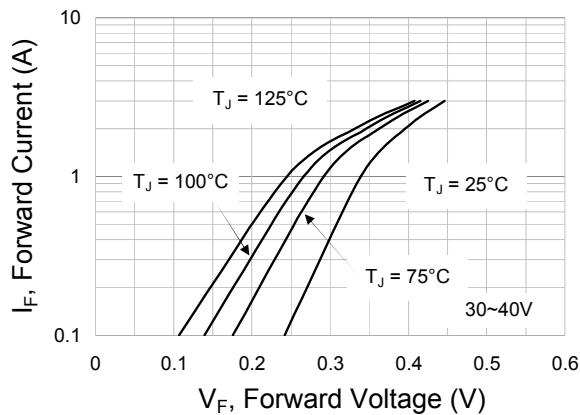


Fig.7 Typical Forward Characteristics

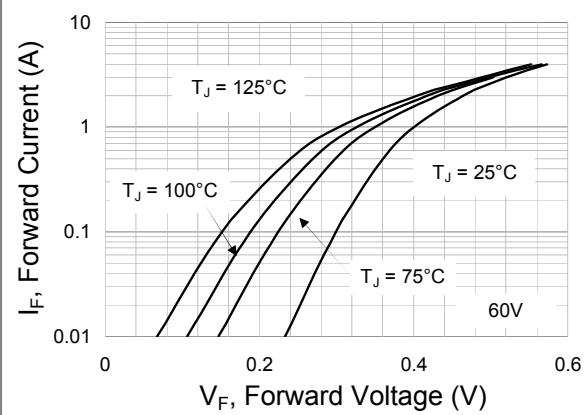


Fig.8 Typical Forward Characteristics

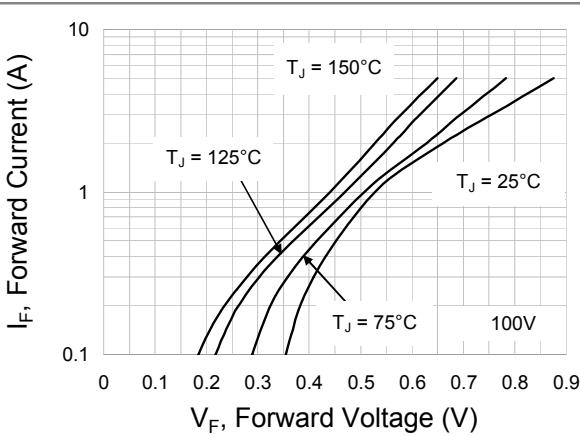
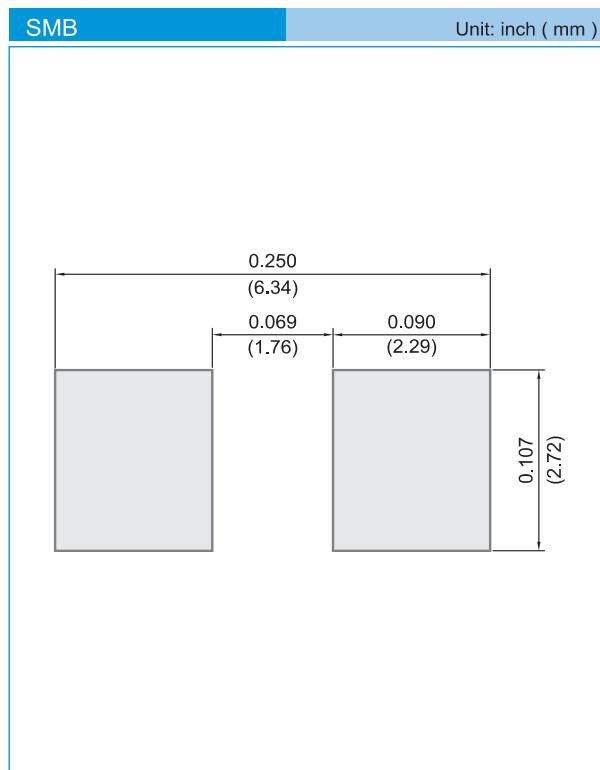


Fig.9 Typical Forward Characteristics



## SK23L SERIES

### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information
  - T/R - 3K per 13" plastic Reel
  - T/R - 0.5K per 7" plastic Reel



## SK23L SERIES

### Part No\_packing code\_Version

SK23L\_R1\_00001

SK23L\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code XX				Version Code XXXXX		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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