



# SK54L~SK56L

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 40~60 Volt **CURRENT** 5 Ampere

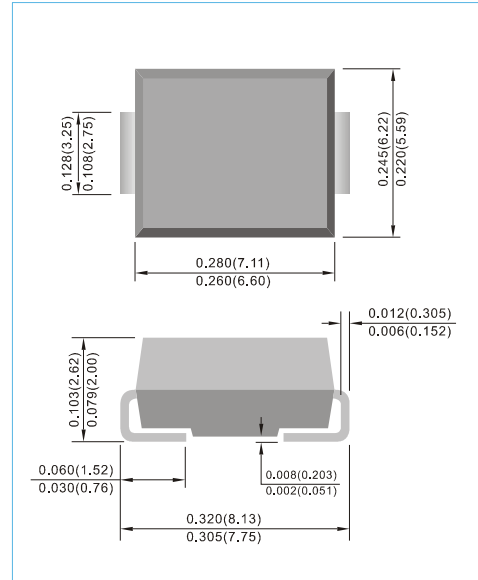
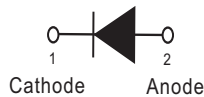
**SMC / DO-214AB** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Low power loss,high efficiency
- High surge capacity
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### MECHANICAL DATA

- Case: JEDEC DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0082 ounces, 0.2325 grams



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

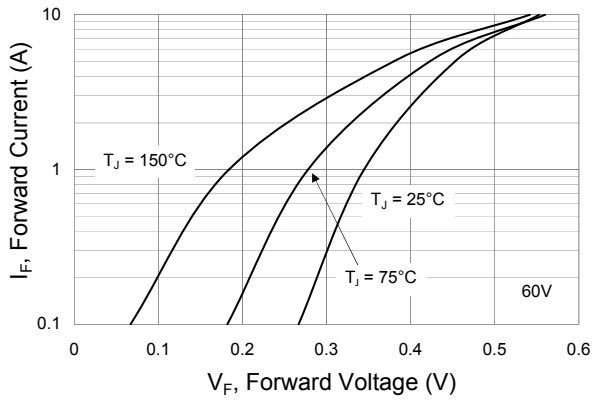
PARAMETER	SYMBOL	SK54L	SK56L	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	60	V
Maximum RMS Voltage	$V_{RMS}$	28	42	V
Maximum DC Blocking Voltage	$V_{DC}$	40	60	V
Maximum Average Forward Rectified Current at $T_c=120^\circ\text{C}$	$I_{F(AV)}$	5		A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100		A
Maximum Forward Voltage at 5A (Note 1)	$V_F$	0.44	0.5	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.5 50		$T_J=25^\circ\text{C}$ mA $T_J=100^\circ\text{C}$
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	17		$^\circ\text{C} / \text{W}$
Operating Junction Temperature Range	$T_J$	-55 to +150		$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150		$^\circ\text{C}$

### NOTES:

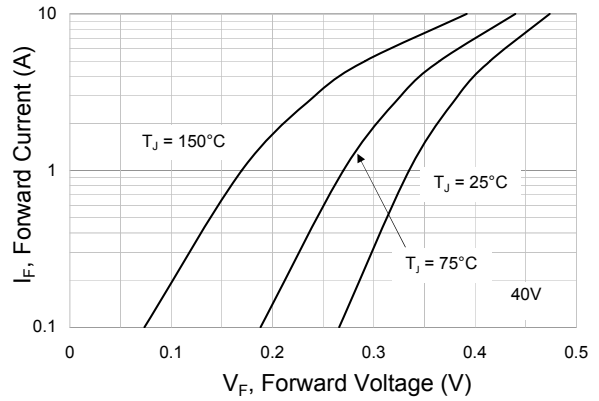
1. Pulse Test with PW =300µsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 14mm<sup>2</sup> (.013mm thick) copper pad areas.



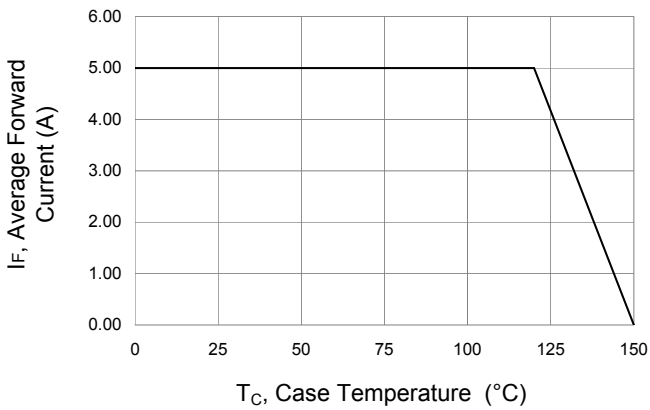
# SK54L~SK56L



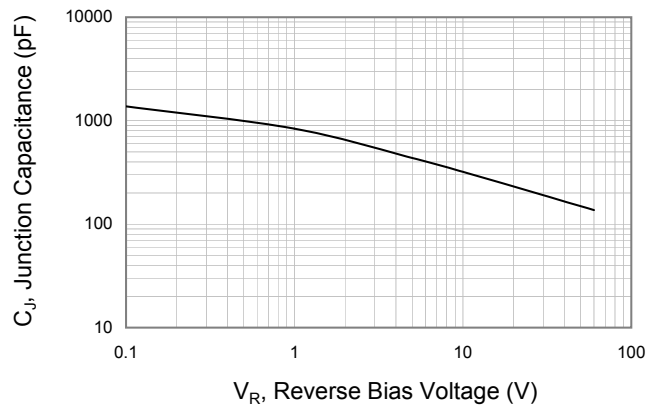
**Fig.1 Typical Forward Characteristics**



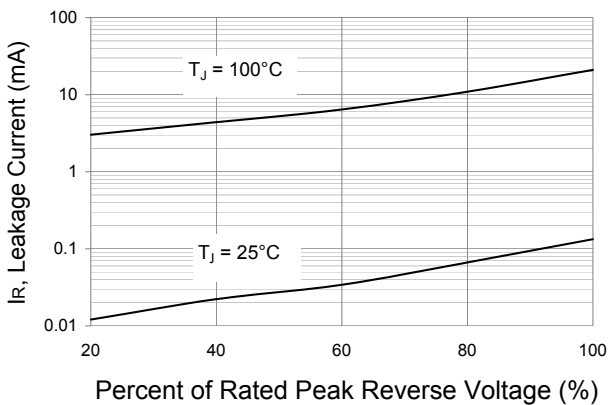
**Fig.2 Typical Forward Characteristics**



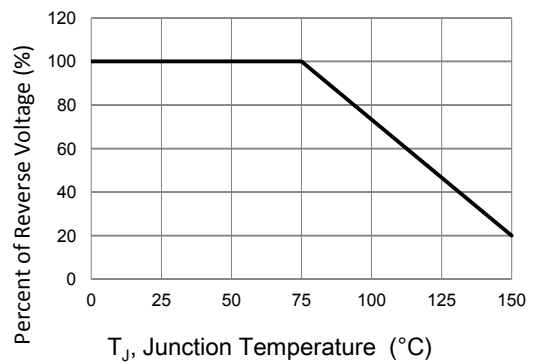
**Fig.3 Forward Current Derating Curve**



**Fig.4 Typical Junction Capacitance under Bias**



**Fig.5 Typical Reverse Characteristics**



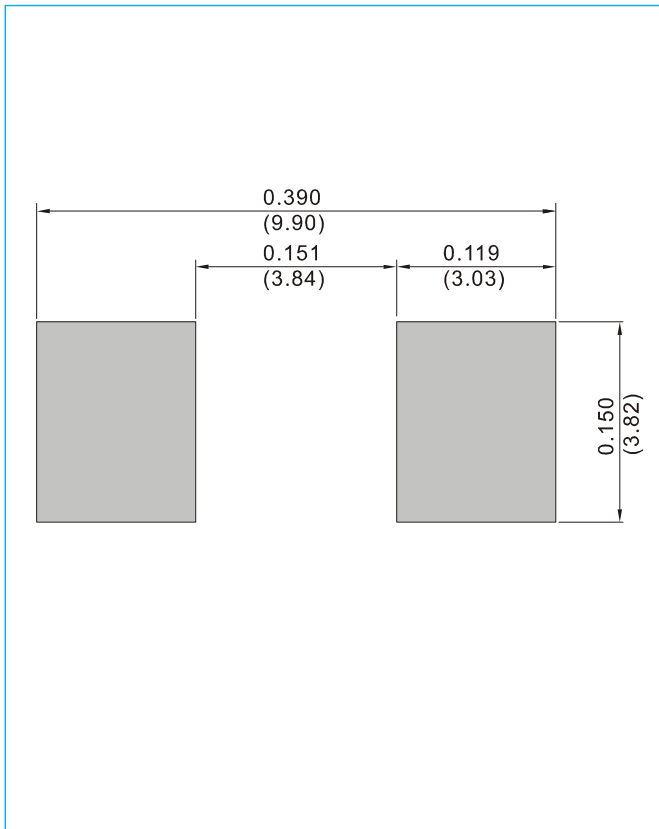
**Fig.6 Operating Temperature Derating Curve**



# SK54L~SK56L

## MOUNTING PAD LAYOUT

**SMC / DO-214AB** Unit : inch(mm)



## ORDER INFORMATION

- Packing information
  - T/R - 3K per 13" plastic Reel
  - T/R - 0.8K per 7" plastic Reel



## SK54L~SK56L

### Part No\_packing code\_Version

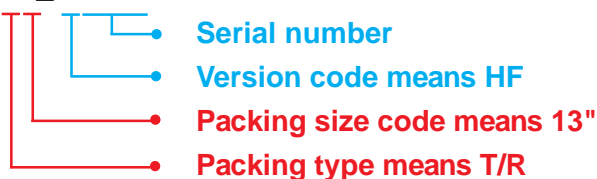
SK54L\_R1\_00001

SK54L\_R2\_00001

For example :

**RB500V-40\_R2\_00001**

Part No.



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
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			



## SK54L~SK56L

---

### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.