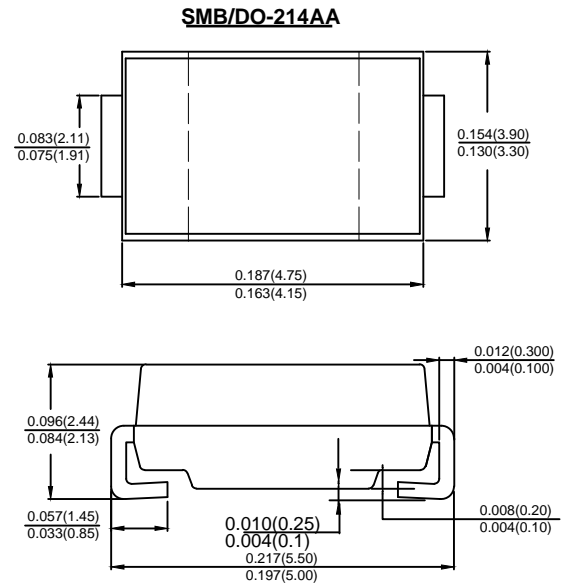


Features

- Schottky Barrier Chip
- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: Molded plastic SMB
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

Type Number	SYMBOL	SK 12	SK 13	SK 14	SK 145	SK 15	SK 16	SK 18	SK 110	SK 115	SK 120	SK 125	Unit	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	150	200	250	V	
Maximum RMS Voltage	V_{RMS}	14	21	28	31	35	42	56	70	105	140	175	V	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	45	50	60	80	100	150	200	250	V	
Average Rectified Output Current @ $T_L = 100^\circ C$	$I_{F(AV)}$	1.0											A	
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30											A	
Forward Voltage @ $I_F = 1.0A$ (Note 1)	V_{FM}	0.55			0.7		0.85		0.92		0.95		V	
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	0.1						0.05						mA
At Rated DC Blocking Voltage @ $T_A = 100^\circ C$		10						5						
I^2t Rating for fusing ($t < 8.3ms$)	I^2t	3.73											A^2s	
Typical Junction Capacitance	C_J	50											pF	
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JA}$	88											$^\circ C/W$	
Operating Temperature Range	T_J	-55 to +150											$^\circ C$	
Storage Temperature Range	T_{STG}	-55 to +150											$^\circ C$	

Note: 1. Pulse Test with $PW = 300\mu sec$, 1% Duty Cycle.

2. Mounted on P.C. Board with 5.0 mm^2 (0.13mm thick) copper pad areas.

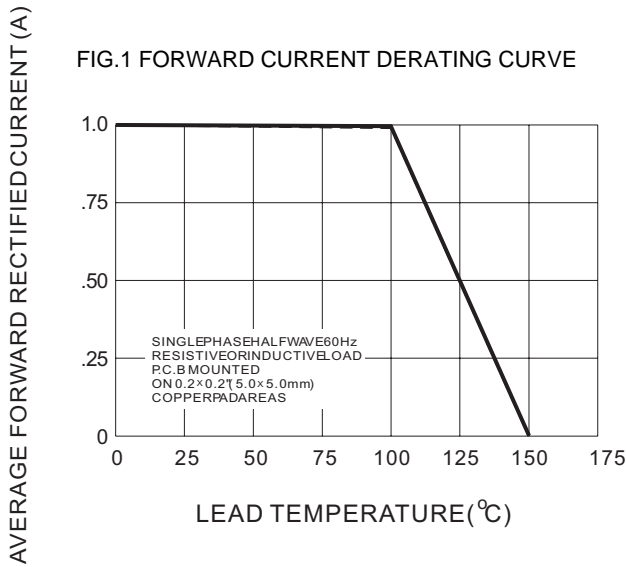


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

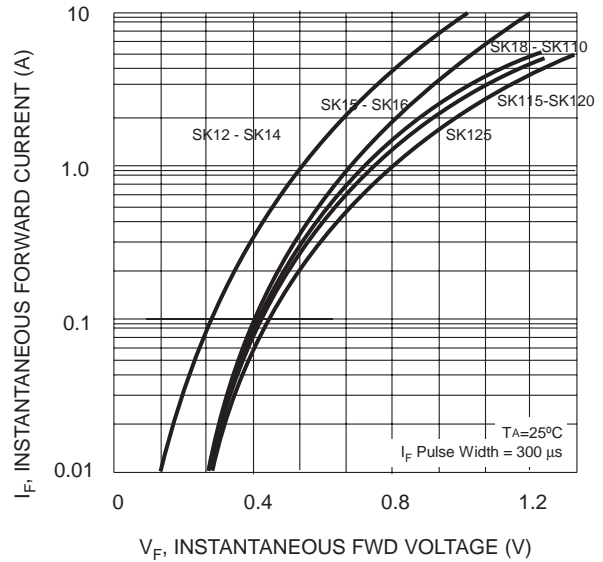


FIG.3 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

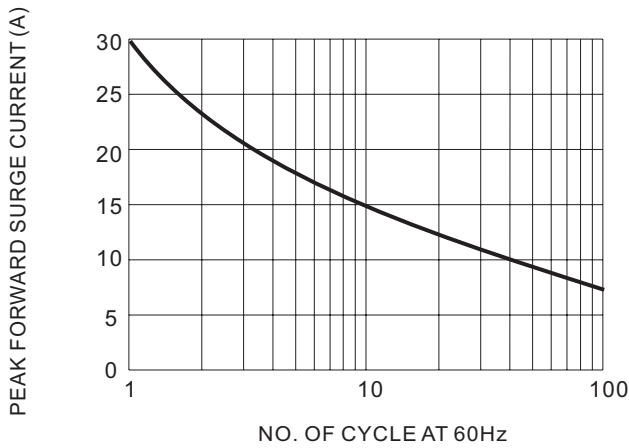


FIG.4 TYPICAL REVERSE CHARACTERISTIC

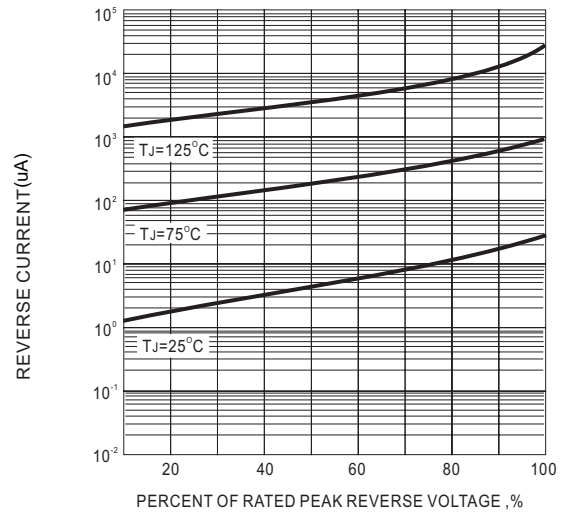
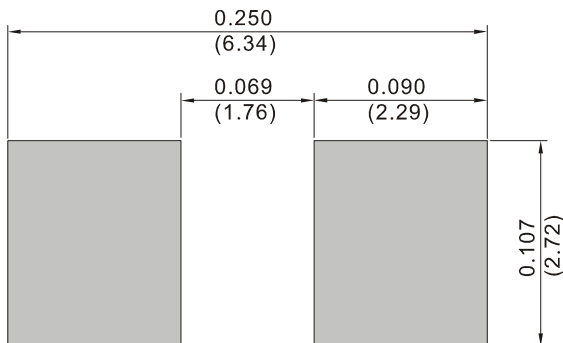


FIG.5 MOUNTING PAD LAYOUT



Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from DIYI.
- DIYI reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- DIYI disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- DIYI 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.
DIYI 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 DIYI for any damages resulting from such improper use or sale.
- Since DIYI uses lot number as the tracking base, please provide the lot number for tracking when complaining.