



SK52FU THRU SK525FU

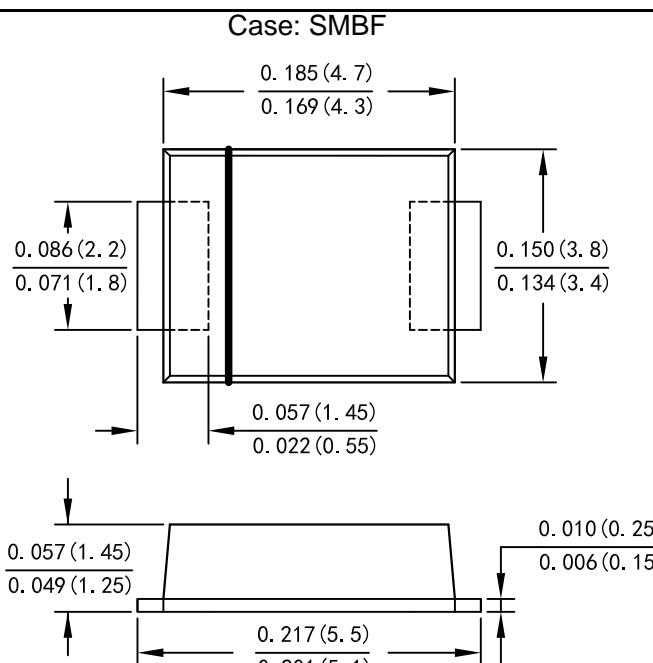
5.0 AMP Surface Mount Schottky Barrier Rectifiers

Features

- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

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



Dimensions in inches and (millimeters)

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 52FU	SK 53FU	SK 54FU	SK 545FU	SK 55FU	SK 56FU	SK 58FU	SK 510FU	SK 515FU	SK 520FU	SK 525FU	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 °C	I _{F(AV)}	5.0											A								
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	110											A								
I ² t Rating for Fusing (t < 8.3ms)	I ² t	50.215											A ² s								
Forward Voltage @I _F = 5.0A	V _{FM}	0.53		0.67		0.8		0.9		0.92		V									
Peak Reverse Current @T _A = 25 °C	I _R	0.1				0.05															
At Rated DC Blocking Voltage @T _A = 100 °C		10				5															
Typical Junction Capacitance (Note 1)	C _J	220				110															
Typical Thermal Resistance (Note 2)	R _{θ JA} R _{θ JL} R _{θ JC}	95 13 17											°C/W								
Operating Temperature Range	T _J	-55 to +150											°C								
Storage Temperature Range	T _{STG}	-55 to +150											°C								

Note:

1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C
2. Device mounted on FR-4 substrate, 1" x 1", 2oz, single-sided, PC boards with 0.1" x 0.15" copper pad. For reference only



SK52FU THRU SK525FU

5.0 AMP Surface Mount Schottky Barrier Rectifiers

Fig. 1 Forward Current Derating Curve

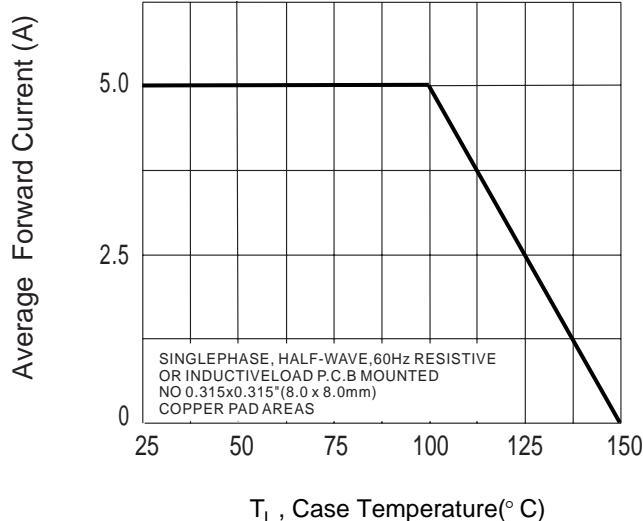


Fig. 2 Typ. Forward Characteristics

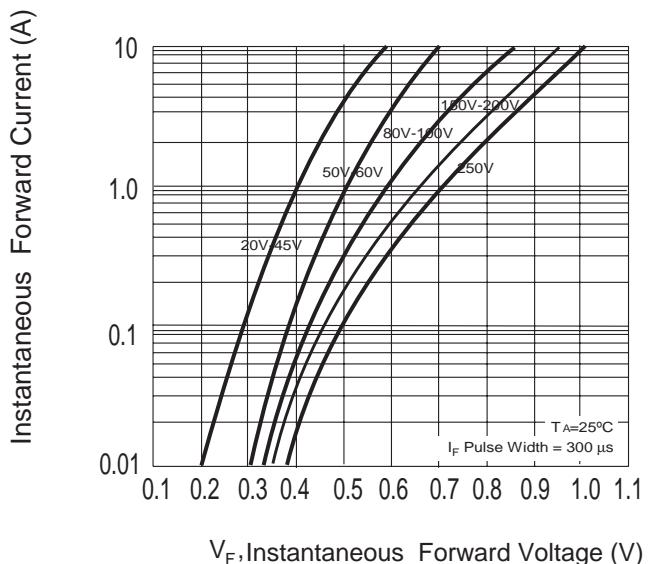


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

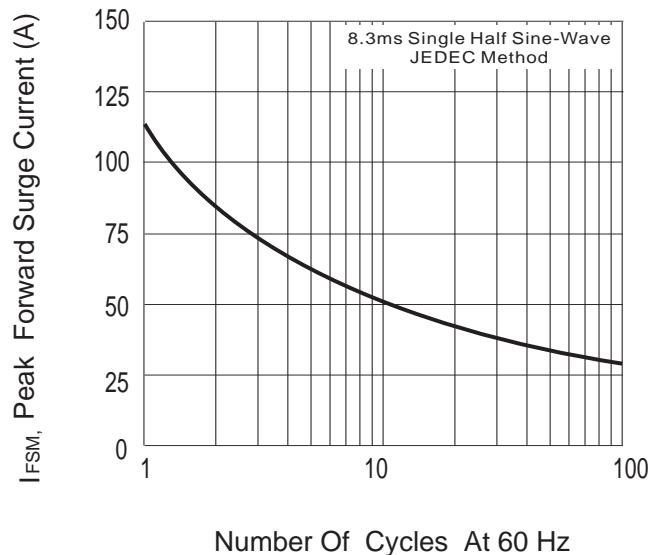


Fig.4 Typical Reverse Characteristics

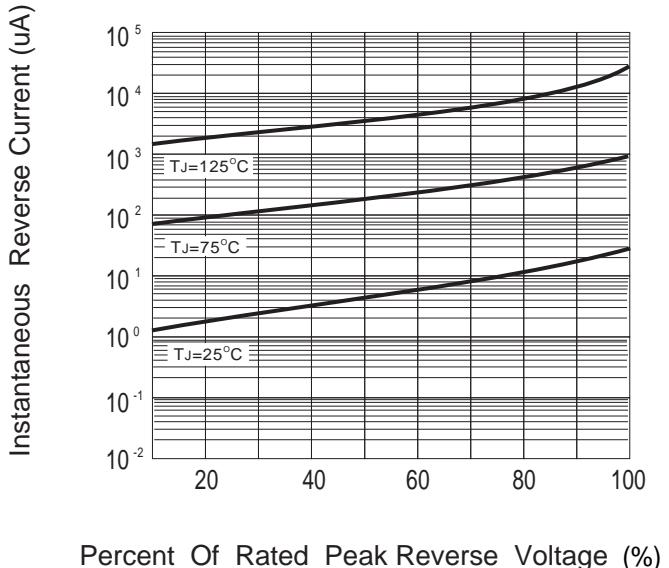
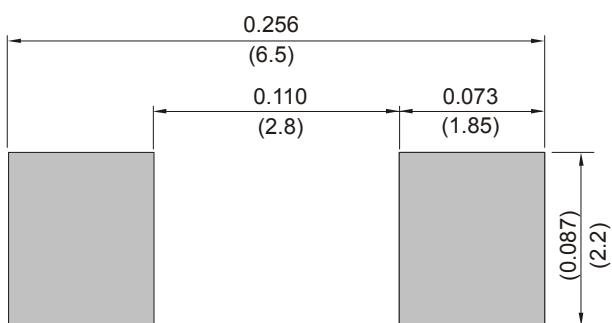


Fig.5 Mounting PAD Layout





Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from XINNUO
- XINNUO reserves the right to make changes to this document and its products and specifications
- XINNUO disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.
XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown here in 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 XINNUO for any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.