



DATA SHEET

SK12~S110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 100 Volts **CURRENT** 1.0 Ampere

SMB/DO-214AA

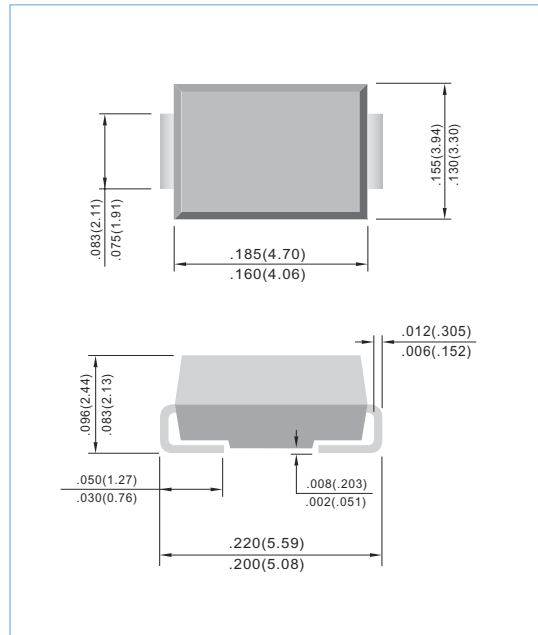
Unit: inch (mm)

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
- High current capacity ,low V_F
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.
- 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 positive end (cathode)
 Standard packaging: 12mm tape (EIA-481)
 Weight: 0.003 ounce, 0.093 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SK12	SK13	SK14	SK15	SK16	SK18	SK19	S110	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum Average Forward Current .375"(9.5mm) lead length at $T_L=75^\circ C$	I_{AV}	1.0								A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30								A
Maximum Forward Voltage at 1.0A (Note 1)	V_F	0.5		0.7		0.85			V	
Maximum DC Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$	I_R					0.5				mA
Maximum Thermal Resistance (Note 2)	$R_{\theta JL}$					30				$^\circ C / W$
	$R_{\theta JA}$					95				
Operating Junction Temperature Range	T_J					-50 to +125				$^\circ C$
Storage Temperature Range	T_{STG}					-50 to +150				$^\circ C$

NOTES:

- A.Pulse Test with $PW = 300\mu sec$, 1% Duty Cycle.
 B.Mounted on P.C. Board with $5.0mm^2$ (.013mm thick) copper pad areas.



RATING AND CHARACTERISTIC CURVES

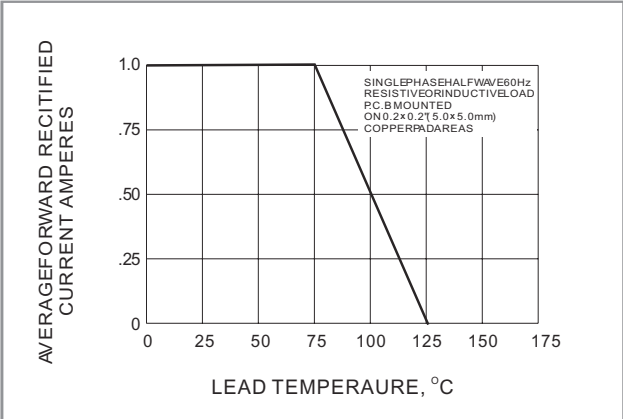


Fig.1- FORWARD CURRENT DERATING CURVE

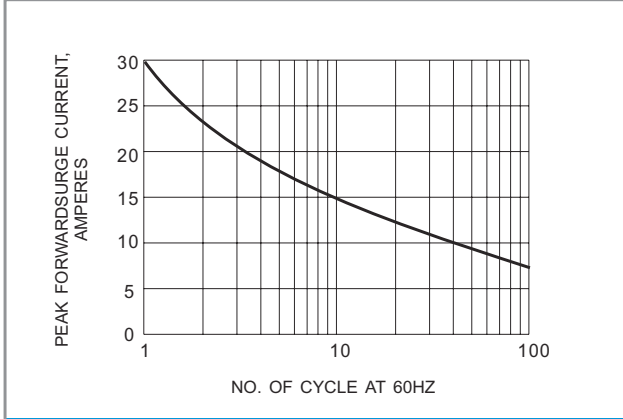


Fig.2- MAXIMUMNON-REPETITIVEPEAK FORWARD SURGE CURRENT

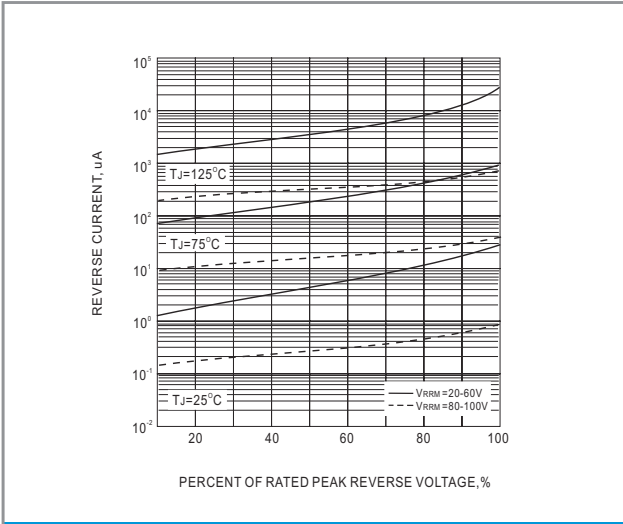


Fig.3- TYPICAL REVERSE CHARACTERISTIC

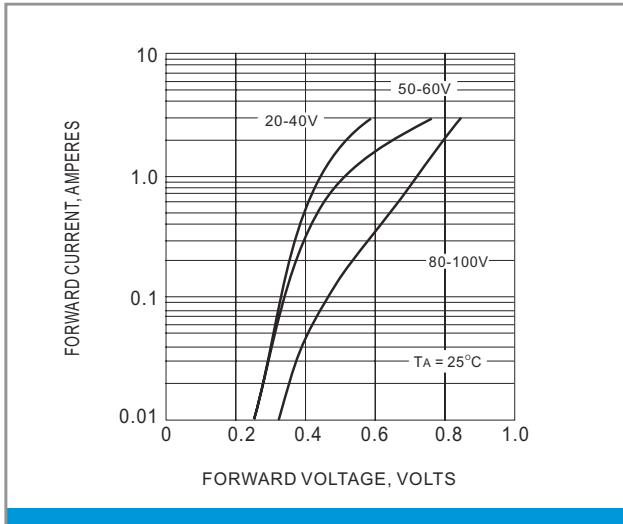
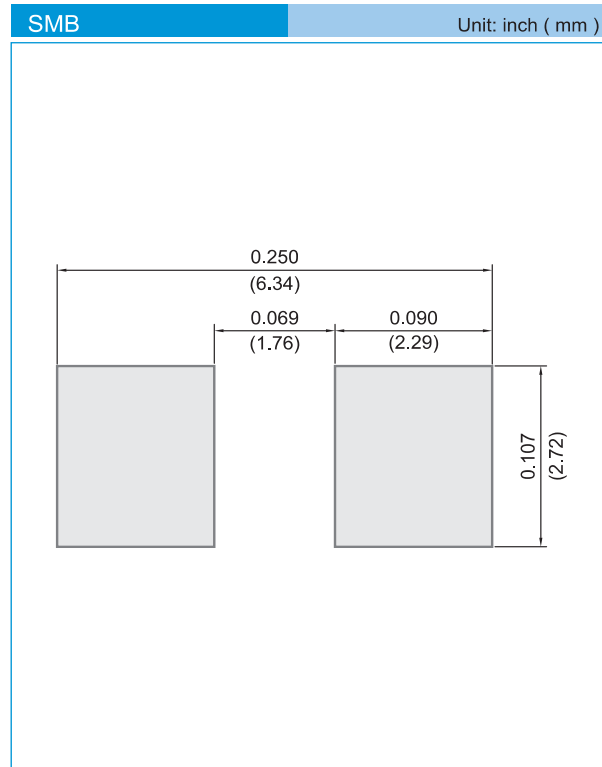


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



MOUNTING PAD LAYOUT



ORDER INFORMATION

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



Part No_packing code_Version

SK12_R1_00001

SK12_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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			



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.