MSKSEMI 美森科













ESD

TVS

TSS

MOV

GDT

PLED

SK102B-MS THRU SK1010B-MS

Product specification



SK102B-MS THRU SK1010B-MS

Features

- The plastic package carries Underwriters Laboratory
 Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss,high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:
 250 °C/10 seconds at terminals

MECHANICAL DATA

Cas e : JEDEC DO-214AA/SMB molded plastic body

Termina ls : Solderable per MIL-STD-750, Method 2026

Po larity: Color band denotes cathode end Moun ting

Po s ition : Any

Weigh t: 0.002 ounce, 0.07 grams

Reference News

PACKAGE OUTLINE	Schematic Diagram
SMB(DO-214AA)	

Marking

SK102B-MS	SK103B-MS	SK1035B-MS	SK104B-MS
SK102	SK103	SK1035	SK104
SK1045B-MS	SK106B-MS	SK108B-MS	SK1010B-MS
SK1045	SK106	SK108	SK1010

Maximum Ratings And Electrical Characteristics

Ratings at 25 ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

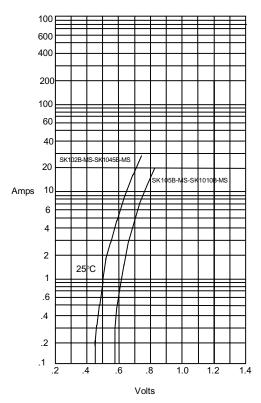
Parameter	SYMBOLS	SK102B -MS	SK103B -MS	SK1035 B-MS	SK104B -MS	SK1045 B-MS	SK106B -MS	SK108B -MS	SK1010B -MS	UNITS
Maximum repetitive peak reverse voltage	Vrrm	20	30	35	40	45	60	80	100	V
Maximum RMS voltage	VRMS	14	21	24.5	28	31.5	42	56	70	V
Maximum DC blocking voltage	VDC	20	30	35	40	45	60	80	100	V
Maximum average forward rectified current at TL(see fig.1)	l(AV)	10.0			Α					
Peak forward surge current								А		
8.3ms single half sine-wave	IFSM	150								
superimposed onrated load (JEDEC Method)										
Maximum instantaneous forward voltage at 10.0A	VF	0.55		0.65	0.	85	V			
Maximum DC reverse current Ta=25 °C		1.0		1.0			_			
at rated DCblocking voltage T _A =100°C	lR	20.0			mA					
Typical junction capacitance (NOTE 1)	CJ		500					pF		
Typical thermal resistance (NOTE 2)	Rθја	18.0						°C/W		
Operating junction temperature range	Тл	-50 to +125						$^{\circ}\!\mathbb{C}$		
Storage temperature range	Тѕтс	-50 to +150			$^{\circ}$ C					

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C. 2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

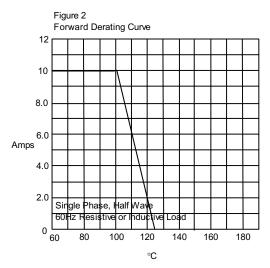


TypicalCharacterisitics

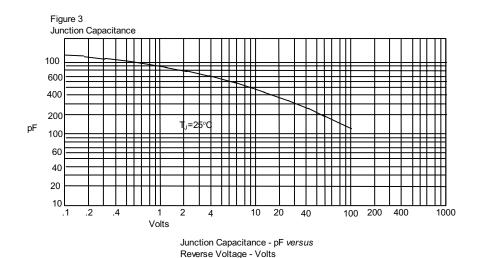
Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperes *versus* Instantaneous Forward Voltage - Volts

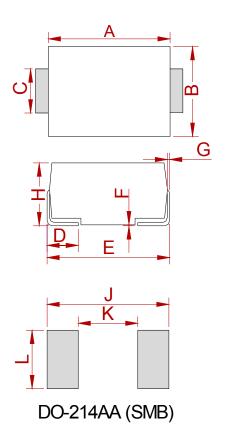


Average Forward Rectified Current - Amperes versus Lead Temperature - C





PACKAGE MECHANICAL DATA



	Dimensions					
Ref.	Millimeters		Inches			
	Min.	Max.	Min.	Max.		
Α	4.25	4.75	0.167	0.187		
В	3.30	3.94	0.130	0.155		
С	1.85	2.21	0.073	0.087		
D	0.76	1.52	0.030	0.060		
Е	5.08	5.59	0.200	0.220		
F	0.051	0.203	0.002	0.008		
G	0.15	0.31	0.006	0.012		
Н	2.11	2.44	0.083	0.096		
J	6.80		0.270			
K		2.60		0.100		
L	2.40		0.090			

REEL SPECIFICATION

P/N	PKG	QTY
SK102B-MS THRU SK1010B-MS	DO-214AA(SMB)	3000



SK102B-MS THRU SK1010B-MS

Attention

- Any and all MSKSEMI Semiconductor products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your MSKSEMI Semiconductor representative nearest you before using any MSKSEMI Semiconductor products described or contained herein in such applications.
- MSKSEMI Semiconductor assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all MSKSEMI Semiconductor products described or contained herein.
- Specifications of any and all MSKSEMI Semiconductor products described or contained herein stipulate the performance, characteristics, and functions of the described products in the independent state, and are not guarantees of the performance, characteristics, and functions of the described products as mounted in the customer's products or equipment. To verify symptoms and states that cannot be evaluated in an independent device, the customer should always evaluate and test devices mounted in the customer'sproducts or equipment.
- MSKSEMI Semiconductor. strives to supply high-quality high-reliability products. However, any and all semiconductor products fail with someprobability. It is possiblethat these probabilistic failures could give rise to accidents or events that could endanger human lives, that could give rise to smoke or fire, or that could cause damage to other property. When designing equipment, adopt safety measures so that these kinds of accidents—or events cannot occur. Such measures include but are not limited to protective circuits anderror prevention circuitsfor safedesign, redundant design, and structural design.
- In the event that any or all MSKSEMI Semiconductor products (including technical data, services) described or contained herein are controlled under any of applicable local export control laws and regulations, such products must not be exported without obtaining the export license from theauthorities concerned in accordance with the above law.
- No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, or any information storage or retrieval system, or otherwise, without the prior written permission of MSKSEMI Semiconductor.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. MSKSEMI Semiconductor believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.
- Any and all information described or contained herein are subject to change without notice due to product/technology improvement, etc. Whendesigning equipment, referto the "Delivery Specification" for the MSKSEMI Semiconductor productthat you intend to use.