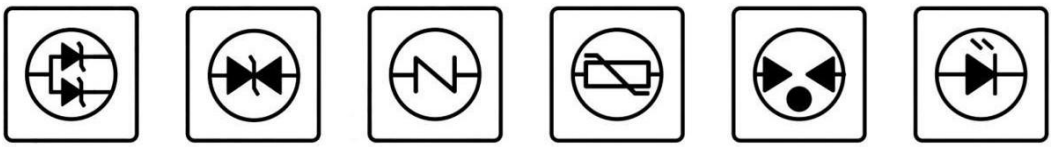
MSKSEMI 美森科
SEMICONDUCTOR



SK102B-MS THRU SK1010B-MS

Product specification

SK102B-MS THRU SK1010B-MS

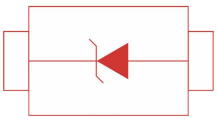
Features

- 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%.

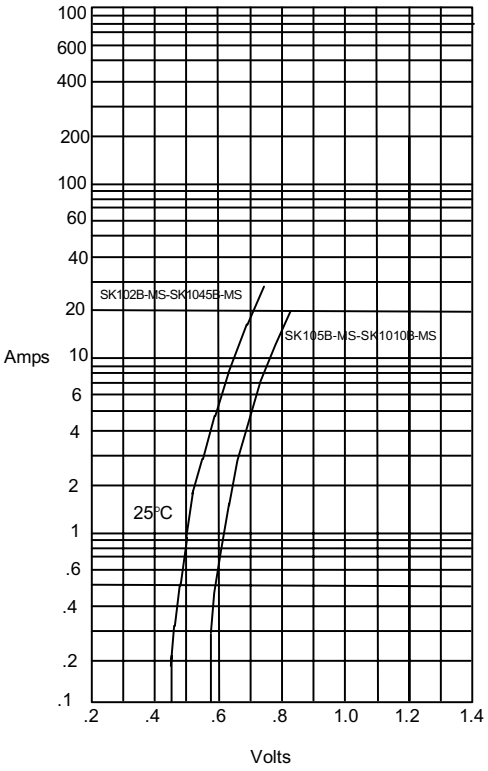
Parameter	SYMBOLS	SK102B-MS	SK103B-MS	SK1035B-MS	SK104B-MS	SK1045B-MS	SK106B-MS	SK108B-MS	SK1010B-MS	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	35	40	45	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	24.5	28	31.5	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	35	40	45	60	80	100	V
Maximum average forward rectified current at TL(see fig.1)	$I_{(AV)}$	10.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	150								A
Maximum instantaneous forward voltage at 10.0A	V_F	0.55					0.65	0.85		V
Maximum DC reverse current at rated DC blocking voltage TA=25℃	I_R	1.0								mA
TA=100℃		20.0								
Typical junction capacitance (NOTE 1)	C_J	500								pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	18.0								℃/W
Operating junction temperature range	T_J	-50 to +125								℃
Storage temperature range	T_{STG}	-50 to +150								℃

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

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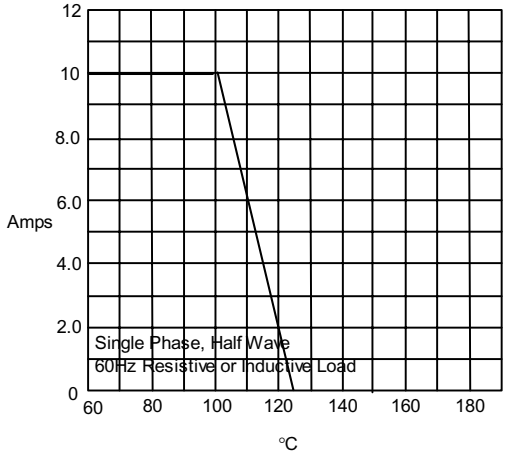
TypicalCharacterisitics

Figure 1
Typical Forward Characteristics



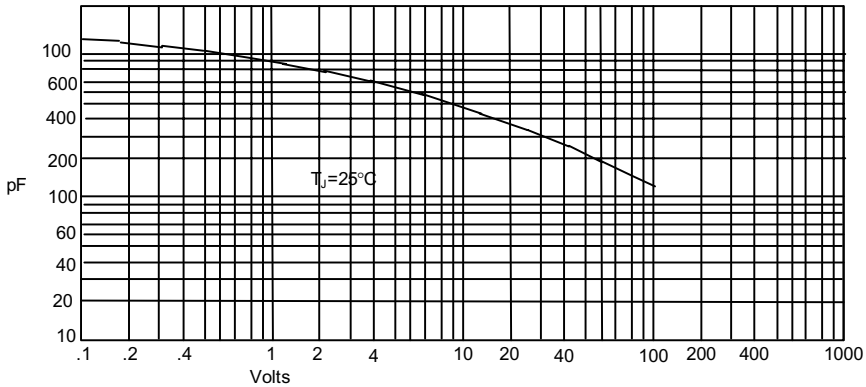
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes
versus Lead Temperature - C

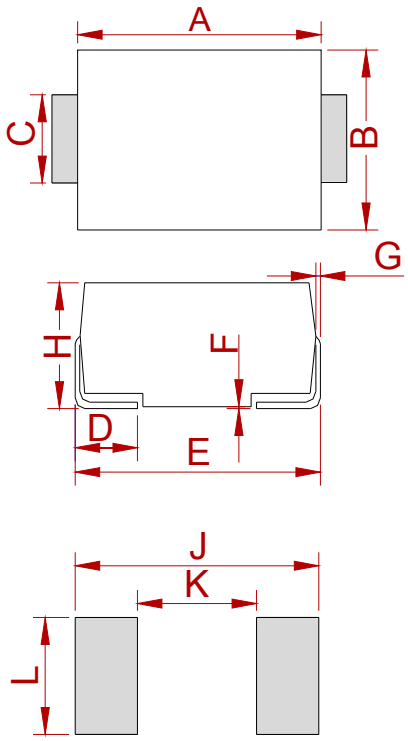
Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

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PACKAGE MECHANICAL DATA



DO-214AA (SMB)

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.75	0.167	0.187
B	3.30	3.94	0.130	0.155
C	1.85	2.21	0.073	0.087
D	0.76	1.52	0.030	0.060
E	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
H	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

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