

# MSKSEMI

SEMICONDUCTOR



ESD



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PLED

Product data sheet

**VOLTAGE RANGE**

20 to 100 Volts

**CURRENT**

3.0 Ampere



SMB

**FEATURES**

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

**MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.093 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

P/N(MARK)	SS32B	SS33B	SS34B	SS35B	SS36B	SS38	SS39B	SS310B	UNITS	
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V	
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V	
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	100	V	
Maximum Average Forward Rectified Current										
At T <sub>L</sub> =100°C									3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)									80	A
Maximum Instantaneous Forward Voltage at 3.0A	0.55		0.70			0.85			V	
Maximum DC Reverse Current Ta=25°C	0.1			0.02					mA	
at Rated DC Blocking Voltage Ta=100°C	5			2					mA	
Typical Junction Capacitance (Note1)									300	pF
Typical Thermal Resistance R <sub>JL</sub> (Note 2)									10	°C/W
Operating Temperature Range T <sub>J</sub>									-65 — +150	°C
Storage Temperature Range T <sub>stg</sub>									-65 — +150	°C

**NOTES:**

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.

RATING AND CHARACTERISTIC CURVES (SS32B THRU SS310B)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

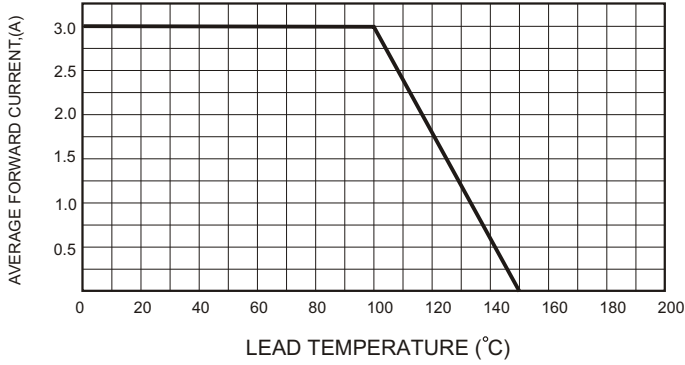


FIG.2-TYPICAL FORWARD CHARACTERISTICS

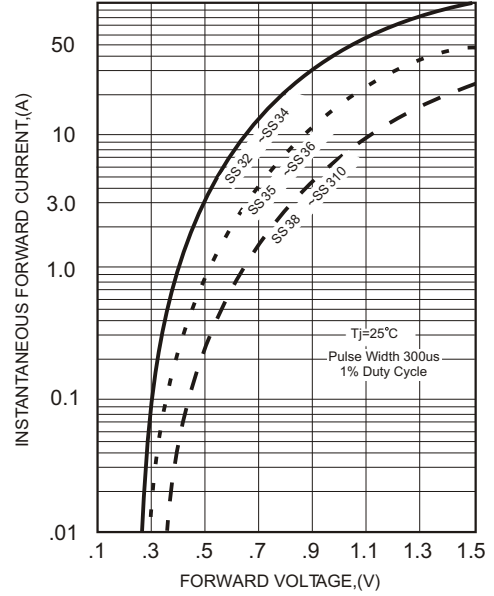


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

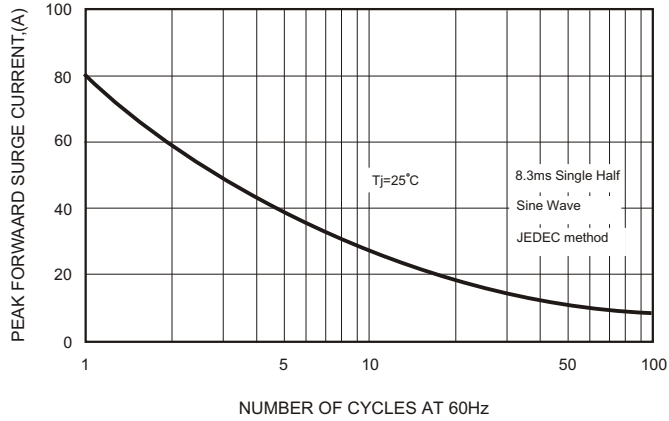


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

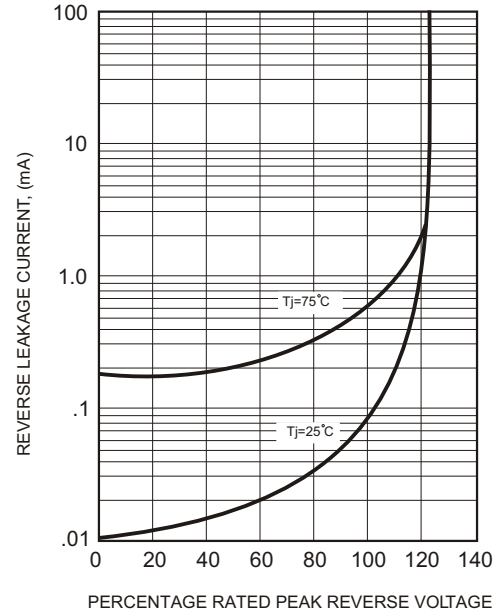
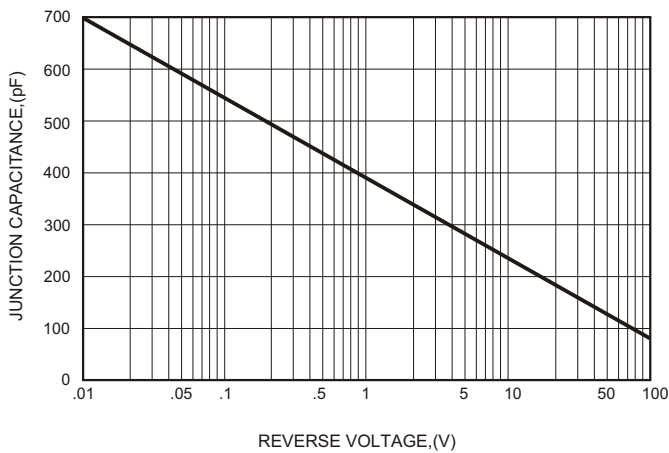
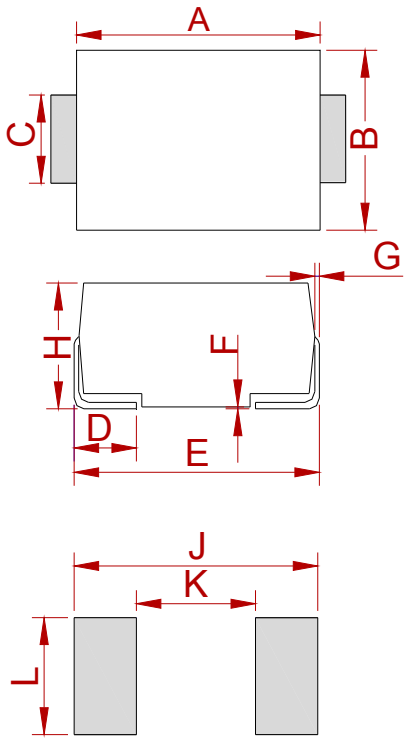


FIG.4-TYPICAL JUNCTION CAPACITANCE



**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
SS32B THRU SS310B	SMB	3000

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