

# MSKSEMI

SEMICONDUCTOR



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PLED

Product data sheet

**VOLTAGE RANGE**

150 to 200 Volts

**CURRENT**

5.0 Amperes



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)	SS515B	SS520B	UNITS
Maximum Recurrent Peak Reverse Voltage	150	200	V
Maximum RMS Voltage	105	140	V
Maximum DC Blocking Voltage	150	200	V
Maximum Average Forward Rectified Current at T <sub>L</sub> =100°C	5.0		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120		A
Maximum Instantaneous Forward Voltage at 5.0A	0.92		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	0.02		mA
	2		mA
Typical Junction Capacitance (Note1)	380		PF
Typical Thermal Resistance R <sub>θ</sub> JL(Note 2)	12		°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 Vertical PC Board Mounting 0.375"(9.5mm) Lead Length.

RATING AND CHARACTERISTIC CURVES (SS515B THRU SS520B)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

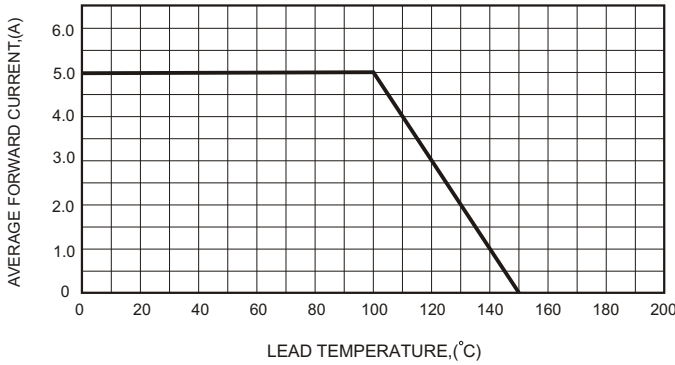


FIG.2-TYPICAL FORWARD CHARACTERISTICS

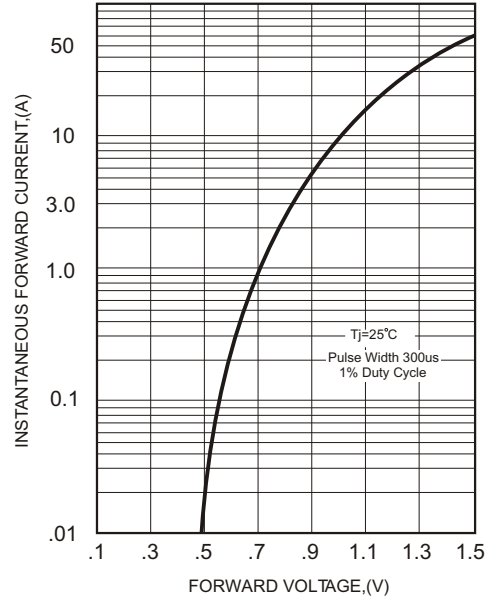


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

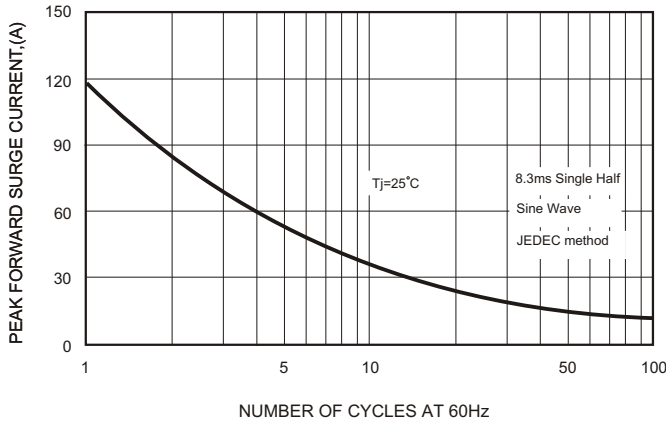


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

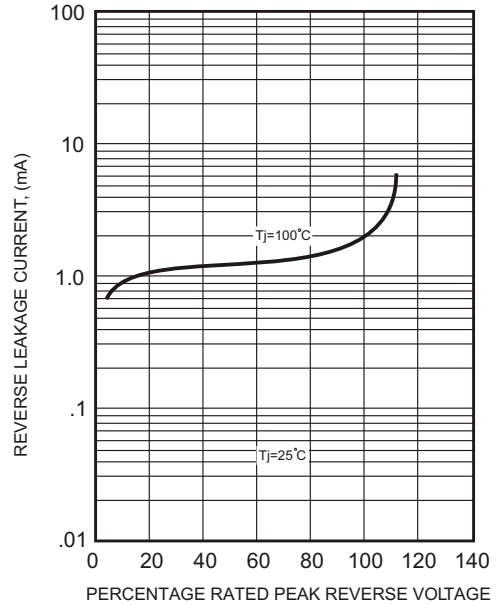
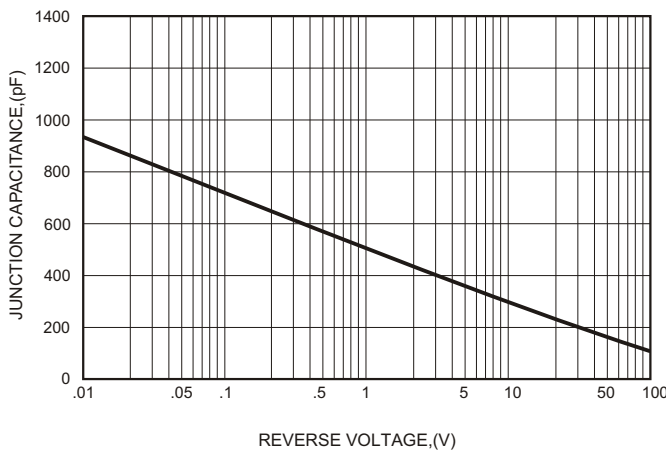
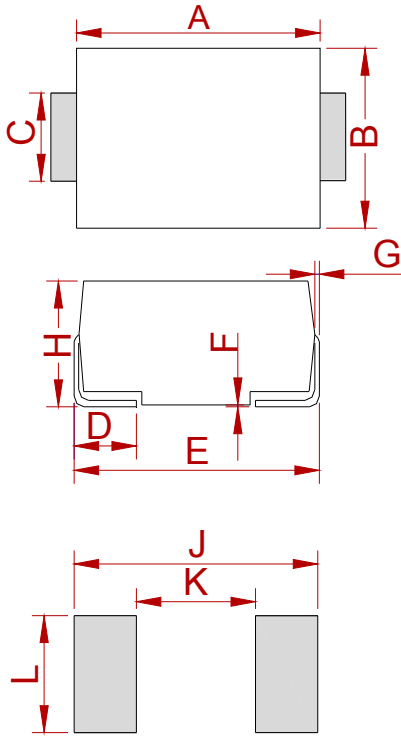


FIG.4-TYPICAL JUNCTION CAPACITANCE



**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
SS515B THRU SS520B	SMB	3000

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