

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- High temperature soldering guaranteed:260℃/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU



### MECHANICAL DATA

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: solder plated ,solderable per MIL-STD-750,method 2026
- Polarity: color band denotes cathode end
- Weight: 0.003ounce,0.093 gram



### TYPICAL APPLICATIONS

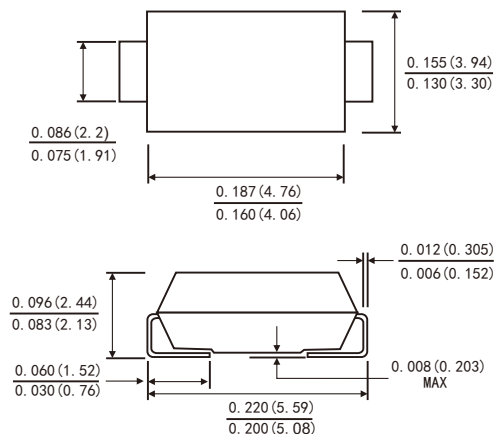
For use in low voltage ,high frequency inverters ,DC/DC converters,  
free wheeling ,and polarity protection applications

### MAXIMUM RATINGS

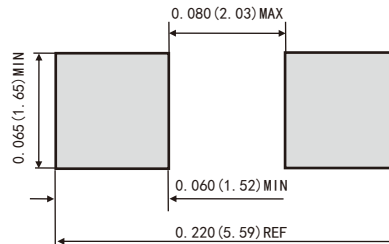
(Ratings at 25℃ ambient temperature unless otherwise specified )

Parameter	Symbol	SS215LB	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	150	V
Maximum average forward rectified current	$I_F(AV)$	2.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	$I_{FSM}$	50	A
Operating junction temperature range	$T_J$	-55 to+150	℃
Storage temperature range	$T_{stg}$	-55 to+150	℃

### SMB(DO-214AA)



### Suggested PAD Layout



Dimensions in inches and (millimeters)

# RATINGS AND CHARACTERISTIC OF SS215LB

## ELECTRICAL CHARACTERISTCS (TA=25℃ Unless otherwise noted)

Parameter	Test Conditions		Symbol	TYP.	MAX.	Unit
Instaneous forward voltage	T <sub>A</sub> =25℃	I <sub>F</sub> =1. 0A	V <sub>F</sub> <sup>1)</sup>	0. 72	—	V
		I <sub>F</sub> =2. 0A		0. 78	0. 85	
	T <sub>A</sub> =125℃	I <sub>F</sub> =1. 0A		0. 57	—	
		I <sub>F</sub> =2. 0A		0. 63	—	
Reverse current	T <sub>A</sub> =25℃	V <sub>R</sub> =150V	I <sub>R</sub> <sup>2)</sup>	—	10	μA
	T <sub>A</sub> =125℃			—	1000	
Typical junction capacitance	4V, 1MHz		C <sub>J</sub>	70		pF

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Pulse test: pulse width≤40ms

## THERMAL CHARACTERISTCS (TA=25℃ Unless otherwise noted)

Parameter	Symbol	SS215LB	Unit
Typical thermal resistance 3)	RθJA	55.0	℃/W
	RθJL	17.0	

3. Unit mounted on PC board with 5.0mm×5.0 mm (0.013 mm thick) copper pads as heat sink

## AVAILABALE PACK INFORMATION

Product code	Pack	Reel Size (mm)	Quantity (pcs/reel)	Box Size L×W×H (mm)	Quantity (reel/box)	Carton Size L×W×H (mm)	Quantity (box/carton)
SS215LB-SMB	T/R	Φ300	3000	340×340×40	2	370×370×370	8

# RATINGS AND CHARACTERISTIC OF SS215LB

FIG.1-FORWARD CURRENT DERATING CURVE

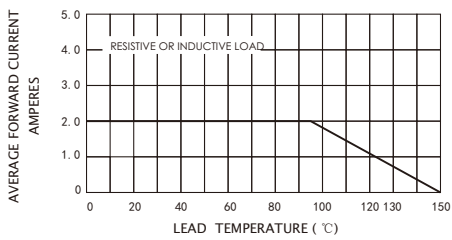


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

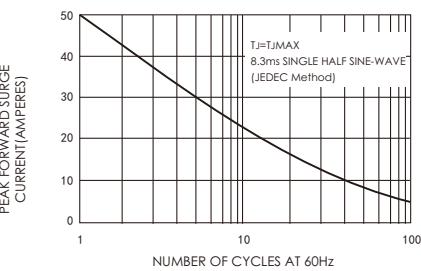


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

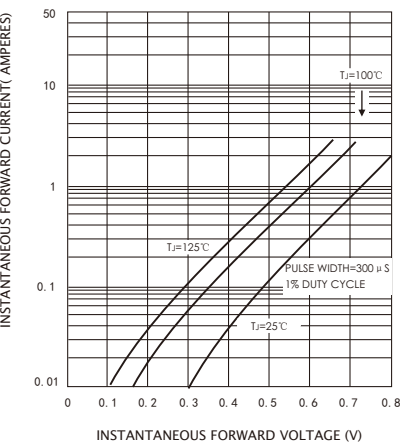


FIG.4-TYPICAL REVERSE CHARACTERISTICS

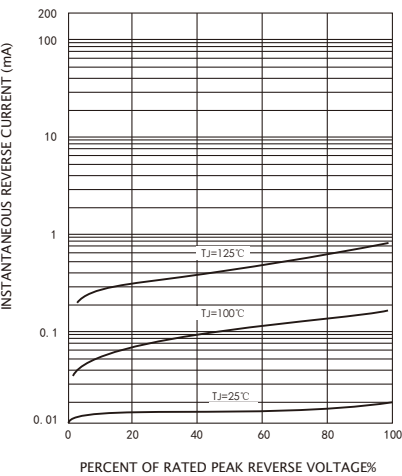


FIG.5-TYPICAL JUNCTION CAPACITANCE

