

Surface Mount Schottky Rectifier

SS52B—SS520B

Features

- ◆ Low profile package
- ◆ Ideal for automated placement
- ◆ Guardring for overvoltage protection
- ◆ Low power losses, high efficiency
- ◆ High forward surge capability



Mechanical Data

Case: DO-214AA(SMB) Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Polarity: Cathode line denotes the cathode end

Mounting Position: Any

Maximum Ratings & Electrical Characteristics

Ratings at TA = 25°C unless otherwise specified

Characteristic	Symbol	SS52B	SS54B	SS56B	SS58B	SS510B	SS515B	SS520B	Units
Peak repetitive reverse voltage	VRRM	20	40	60	80	100	150	200	V
RMS reverse voltage	VRMS	14	28	42	56	70	105	140	V
DC blocking voltage	VDC	20	40	60	80	100	150	200	V
Maximum average forward output current	IF(AV)	5							A
Peak forward surge current,8.3ms single half-sine-wave, @TJ = 25°C	IFSM	120							A
Rating for fusing(t<8.3ms)	I2t	59.76							A2sec
Maximum instantaneous forward voltage @ 5A	VF	0.55		0.7	0.85		0.9		V
Maximum Reverse current Rated VR @TA =25°C @TA =100°C	IR	0.5			0.1			mA	
		20			5				

Thermal Characteristics

Characteristic	Symbol	SS52B	SS54B	SS56B	SS58B	SS510B	SS515B	SS520B	Units
Typical thermal resistance (Note 1)	R θJA	65							°C /W
	R θJL	15							
Operating junction temperature range	TJ	-55~+125			-55~+150				°C
Storage temperature range	TSTG	-55~+150							°C

Note:

(1) Units mounted on P.C.B. with 8.0x 8.0mm copper pads

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Ratings and Characteristic Curves ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Fig.1-Forward Current Derating Curve

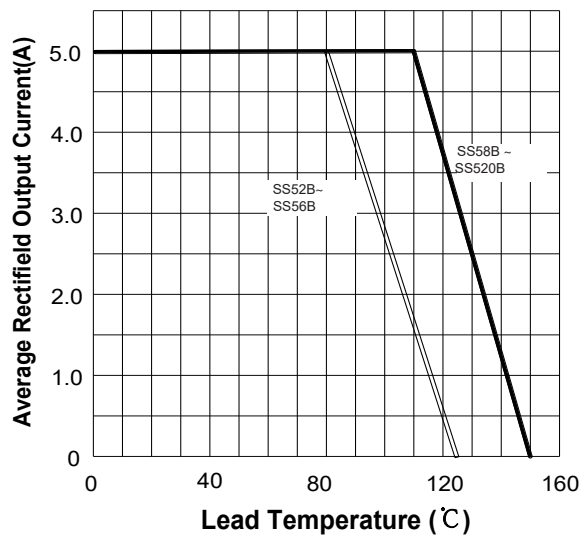


Fig.2- Surge Current Derating Curve

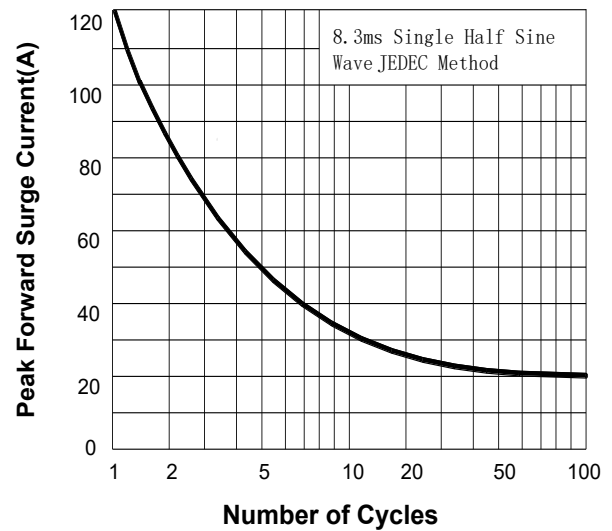


Fig.3- Typical Forward Voltage Characteristic

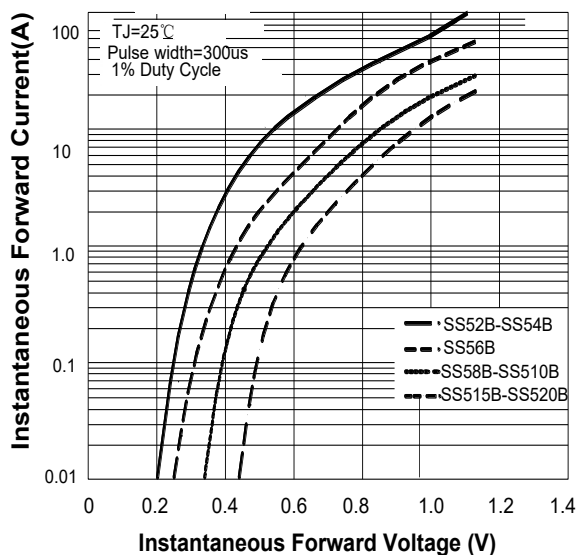
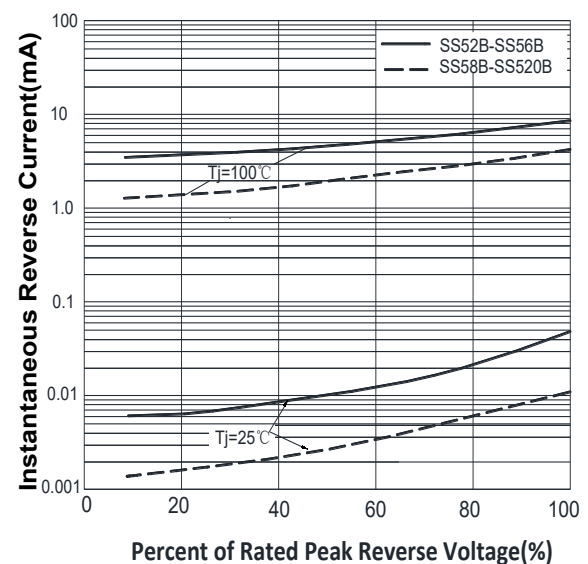


Fig.4- Typical Reverse Characteristic

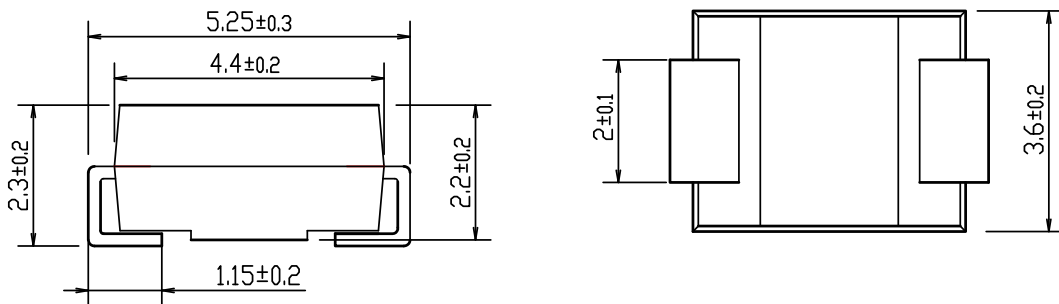


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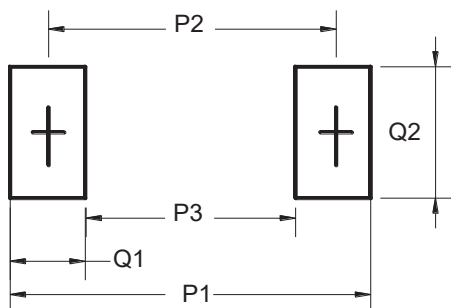
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Package Outline Dimensions(unit:mm)

DO-214AA (SMB)



Mounting Pad Layout(unit:mm)



Dim	Millimeters
P1	6.80
P2	4.30
P3	1.80
Q1	2.50
Q2	2.30

Ordering Information

Part No.	Marking	Package	Shipping
SS52B	SS52B	SMB	3000PCS /Tape&Reel
SS54B	SS54B	SMB	3000PCS /Tape&Reel
SS56B	SS56B	SMB	3000PCS /Tape&Reel
SS58B	SS58B	SMB	3000PCS /Tape&Reel
SS510B	SS510B	SMB	3000PCS /Tape&Reel
SS515B	SS515B	SMB	3000PCS /Tape&Reel
SS520B	SS520B	SMB	3000PCS /Tape&Reel