

Surface Mount Schottky Rectifier

SS52—SS520

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-214AB(SMC) 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	SS52	SS54	SS56	SS58	SS510	SS515	SS520	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	IR	0.5			0.1			mA	
		20			5				

Thermal Characteristics

Characteristic	Symbol	SS52	SS54	SS56	SS58	SS510	SS515	SS520	Units
Typical thermal resistance (Note 1)	R θJA	47							°C /W
	R θJL	13							
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 16x 16mm land areas.

Surface Mount Schottky Rectifier

SS52-SS520

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

Fig.1-Forward Current Derating Curve

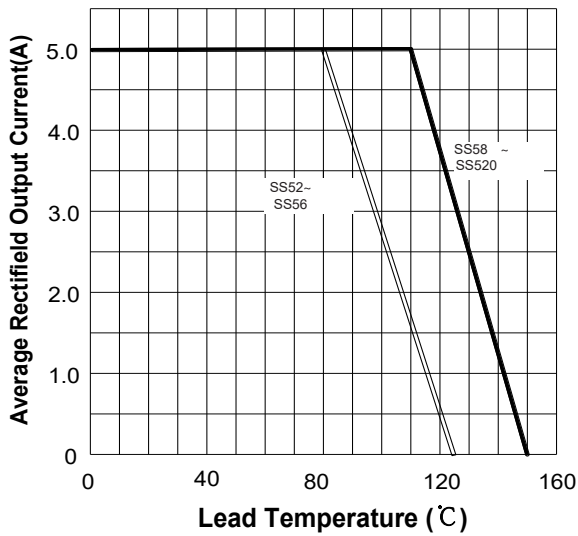


Fig.2- Surge Current Derating Curve

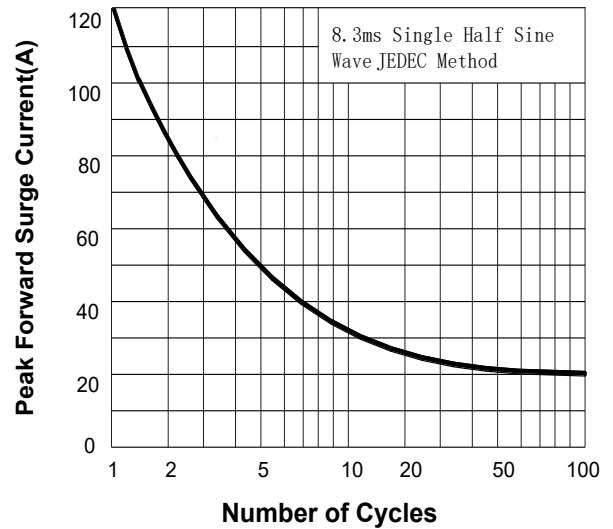


Fig.3- Typical Forward Voltage Characteristic

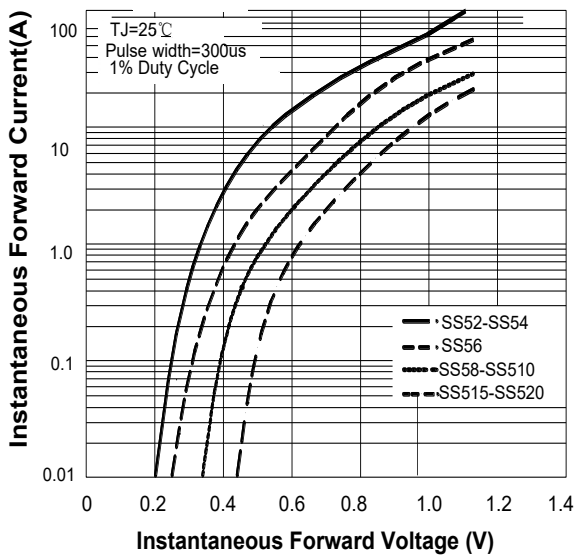
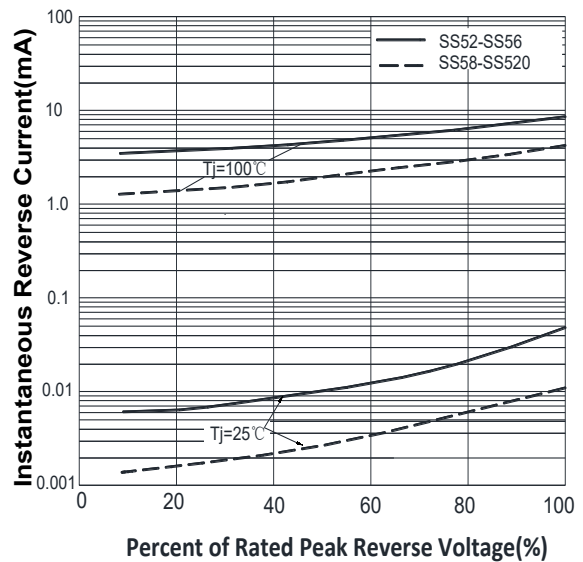


Fig.4- Typical Reverse Characteristic

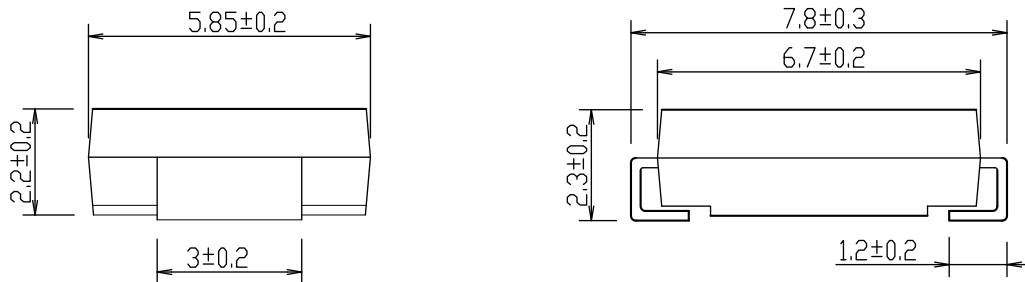


Surface Mount Schottky Rectifier

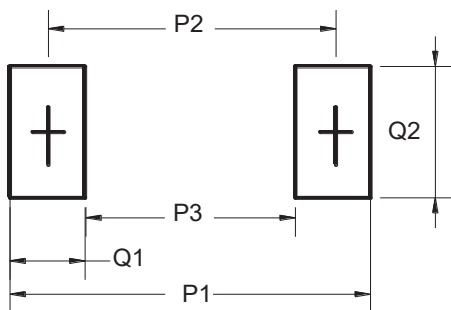
SS52 - SS520

Package Outline Dimensions(unit:mm)

DO-214AB (SMC)



Mounting Pad Layout(unit:mm)



Dim	Millimeters
P1	9.80
P2	6.80
P3	3.80
Q1	3.00
Q2	4.00

Ordering Information

Part No.	Marking	Package	Shipping
SS52	SS52	SMC	3000PCS /Tape&Reel
SS54	SS54	SMC	3000PCS /Tape&Reel
SS56	SS56	SMC	3000PCS /Tape&Reel
SS58	SS58	SMC	3000PCS /Tape&Reel
SS510	SS510	SMC	3000PCS /Tape&Reel
SS515	SS515	SMC	3000PCS /Tape&Reel
SS520	SS520	SMC	3000PCS /Tape&Reel