

SMC Schottky Barrier Rectifier Diode 肖特基势垒整流二极管

■Features 特点

Low forward voltage drop 低正向压降

High current capability 高电流能力

Surface mount device 表面贴装器件

Case 封装:SMC(DO-214AB)



■Maximum Rating 最大额定值

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	SS52C	SS53C	SS54C	SS55C	SS56C	SS58C	SS59C	SS510C	Unit 单位
Marking 印字		SS52	SS53	SS54	SS55	SS56	SS58	SS59	SS510	
Peak Reverse Voltage 反向峰值电压	V_{RRM}	20	30	40	50	60	80	90	100	V
DC Reverse Voltage 直流反向电压	V_R	20	30	40	50	60	80	90	100	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	14	21	28	35	42	56	63	70	V
Forward Rectified Current 正向整流电流	I_F	5								A
Peak Surge Current 峰值浪涌电流	I_{FSM}	120								A
Thermal Resistance J-L 结到管脚热阻	$R_{\theta JL}$	10								$^{\circ}\text{C}/\text{W}$
Junction Temperature 结温	T_J	150								$^{\circ}\text{C}$
Storage Temperature 储藏温度	T_{stg}	$-65\text{to}+150$								$^{\circ}\text{C}$

■Electrical Characteristics 电特性

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic 特性参数	Symbol 符号	SS52C-SS54C	SS55C-SS56C	SS58C-SS510C	Unit 单位	Condition 条件
Forward Voltage 正向电压	V_F	0.55	0.70	0.85	V	$I_F=5\text{A}$
Reverse Current 反向电流	$I_R(25^{\circ}\text{C})$ (100°C)	0.1 5		0.02 2	mA	$V_R=V_{RRM}$
Diode Capacitance 二极管电容	C_D	380			pF	$V_R=4\text{V}, f=1\text{MHz}$

■ Typical Characteristic Curve 典型特性曲线

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

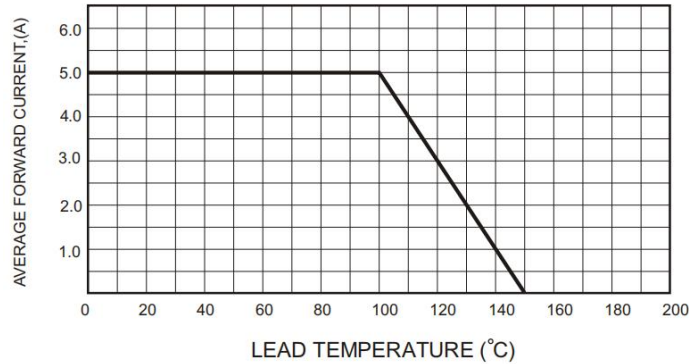


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

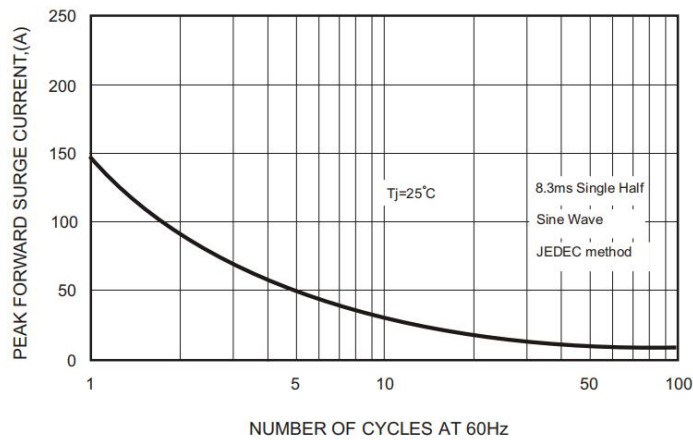


FIG.4-TYPICAL JUNCTION CAPACITANCE

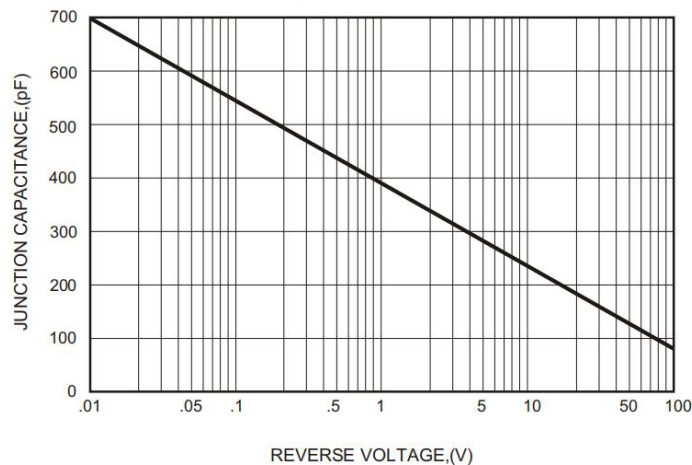


FIG.2-TYPICAL FORWARD CHARACTERISTICS

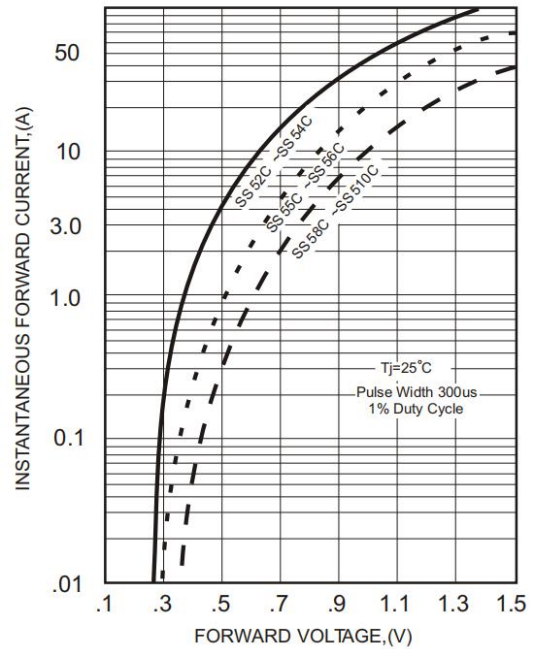
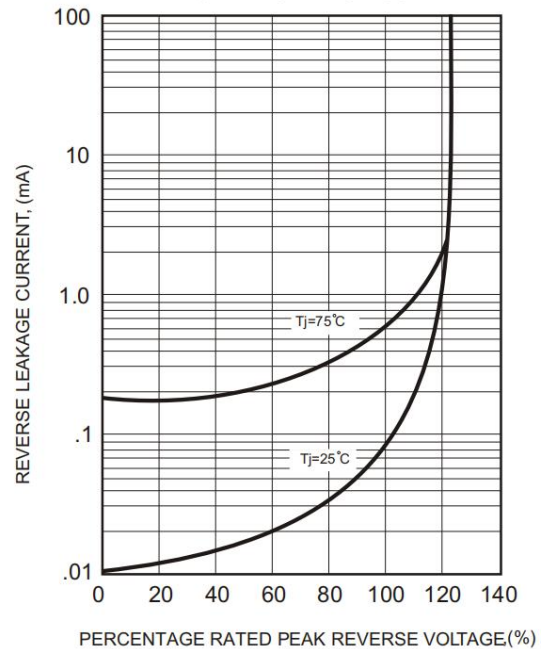
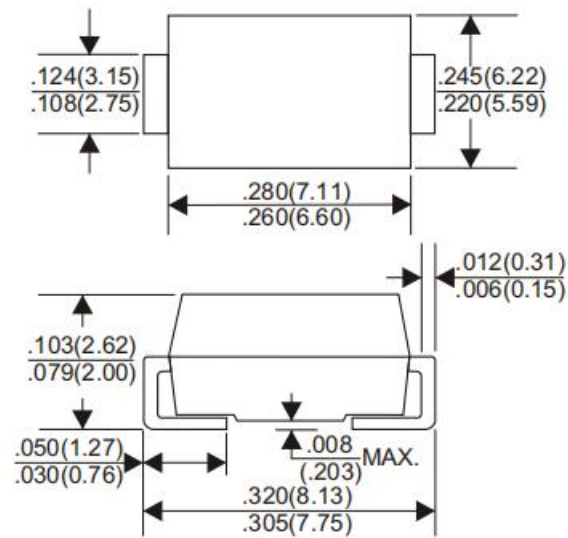


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



■Dimension 外形封装尺寸

DO-214AB(SMC)



Dimensions in inches and (millimeters)