

SMA 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:SMA(DO-214AC)
Q 代表 AEC-Q101 车规



■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	SS56AQ	Unit 单位
Marking 印字		SS56A	
Peak Reverse Voltage 反向峰值电压	V_{RRM}	60	V
DC Reverse Voltage 直流反向电压	V_R	60	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	42	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-A 结到环境热阻	$R_{\theta JA}$	60	$^{\circ}\text{C}/\text{W}$
Thermal Resistance J-L 结到管脚热阻	$R_{\theta JL}$	22	$^{\circ}\text{C}/\text{W}$
Junction Temperature 结温	T_J	150	$^{\circ}\text{C}$
Storage Temperature 储藏温度	T_{stg}	-55to+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	Typ 典型值	Max 最大值	Unit 单位	Condition 条件
Forward Voltage 正向电压	$V_F(25^{\circ}\text{C})$ (125°C)	0.6 0.54	0.7 0.63	V	$I_F=5\text{A}$
Reverse Current 反向电流	$I_R(25^{\circ}\text{C})$ (125°C)	0.008	0.1 20	mA	$V_R=V_{RRM}$
Diode Capacitance 二极管电容	C_D	215		pF	$V_R=4\text{V}, f=1\text{MHz}$

■ Typical Characteristic Curve 典型特性曲线

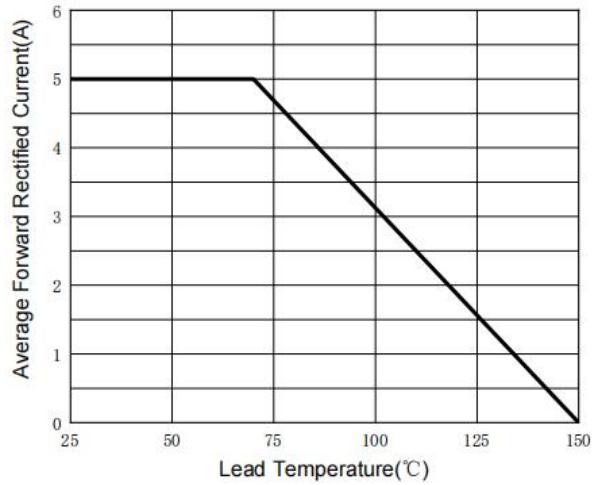


Figure 1: Forward Current Curve

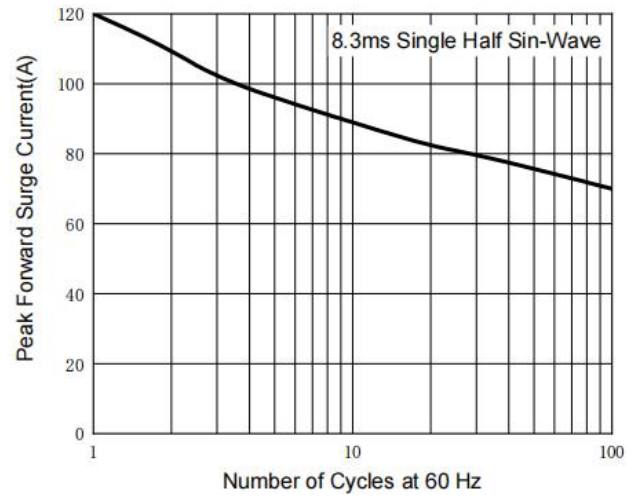


Figure 2: Forward Surge Current Curve

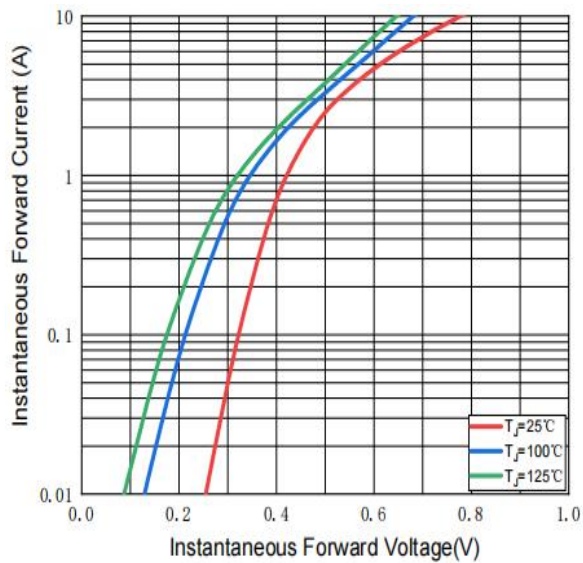


Figure 3: Forward Characteristics

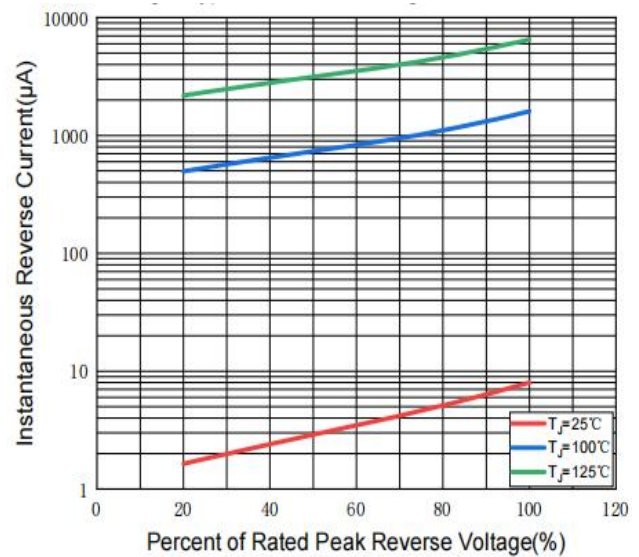
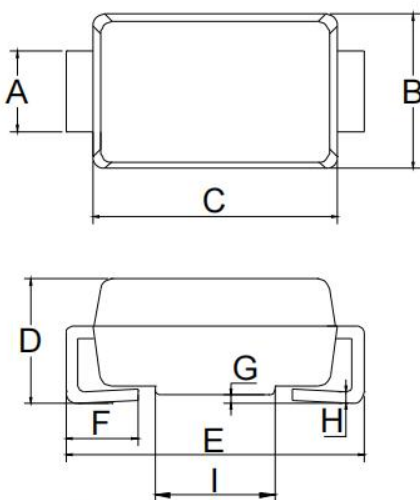


Figure 4: Reverse Characteristics

■Dimension 外形封装尺寸

DO-214AC(SMA)



Dimensions in millimeters

DO-214AC(SMA)		
Dim	Min	Max
A	1.25	1.58
B	2.40	2.83
C	4.00	4.75
D	1.90	2.30
E	4.93	5.28
F	0.76	1.41
G	0.05	0.20
H	0.15	0.31
I	1.7	2.1