



# 安徽富信半导体科技有限公司

ANHUI FOSAN SEMICONDUCTOR TECHNOLOGY CO., LTD.

K12-K120

## SOD-123FL 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:SOD-123FL



### ■ 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  $25^{\circ}\text{C}$ )

Characteristic 特性参数	Symbol 符号	K12	K13	K14	K15	K16	K17	K18	K19	K110	K115	K120	Unit 单位
Peak Reverse Voltage 反向峰值电压	$V_{RRM}$	20	30	40	50	60	70	80	90	100	150	200	V
DC Reverse Voltage 直流反向电压	$V_R$	20	30	40	50	60	70	80	90	100	150	200	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	14	21	28	35	42	49	56	63	70	105	140	V
Forward Rectified Current 正向整流电流	$I_F$	1											A
Peak Surge Current 峰值浪涌电流	$I_{FSM}$	30										50	A
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	80											$^{\circ}\text{C}/\text{W}$
Junction/Storage Temperature 结温/储藏温度	$T_J, T_{stg}$	-50to+150 $^{\circ}\text{C}$											$^{\circ}\text{C}$

### ■ Electrical Characteristics 电特性

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

Characteristic 特性参数	Symbol 符号	K12-K14	K15-K16	K17-K110	K115-K120	Unit 单位	Condition 条件
Forward Voltage 正向电压	$V_F$	0.55	0.70	0.85	0.92	V	$I_F=1\text{A}$
Reverse Current 反向电流	$I_R(25^{\circ}\text{C})$ $(100^{\circ}\text{C})$	0.2 10			0.02 2	mA	$V_R=V_{RRM}$
Diode Capacitance 二极管电容	$C_D$	110			170	pF	$V_R=4\text{V}$ , $f=1\text{MHz}$

## ■ Typical Characteristic Curve 典型特性曲线(K12-K110)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

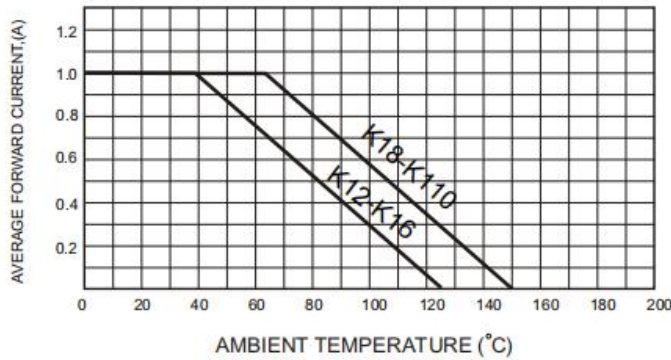


FIG.2-TYPICAL FORWARD CHARACTERISTICS

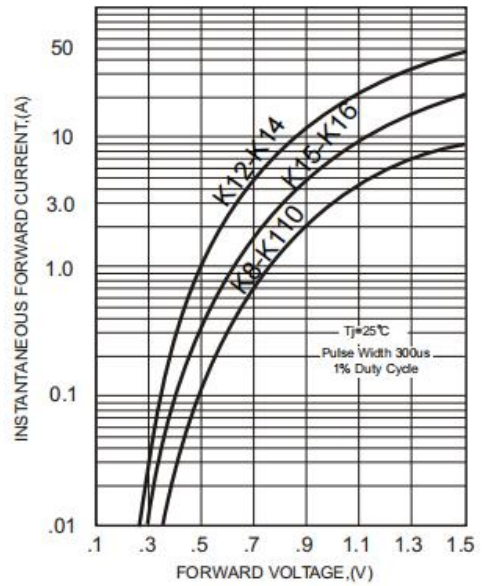


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

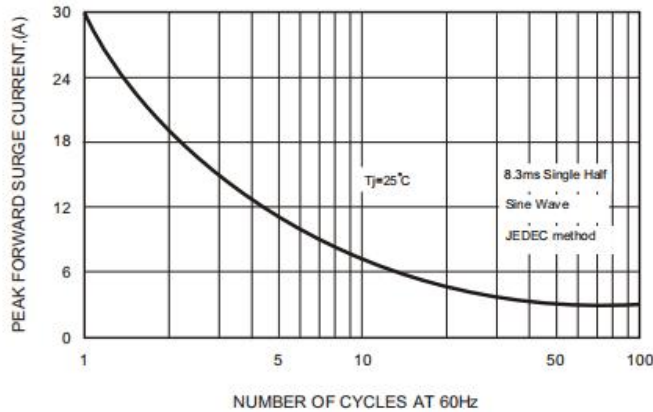


FIG.4-TYPICAL JUNCTION CAPACITANCE

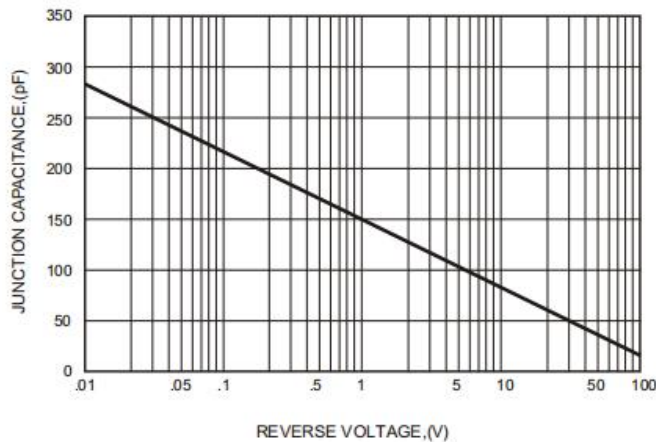
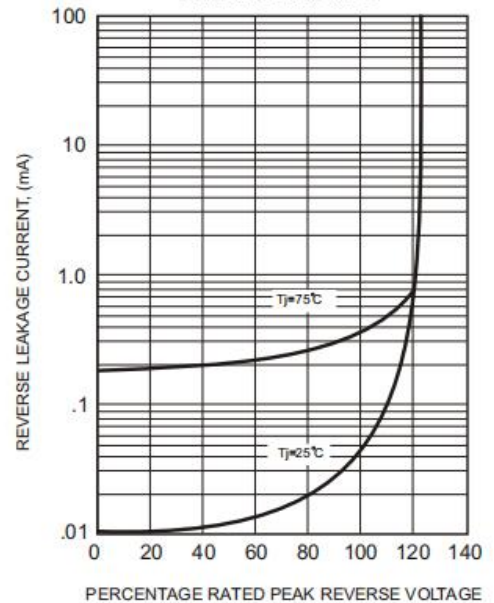


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



## ■ Typical Characteristic Curve 典型特性曲线(K115-K120)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

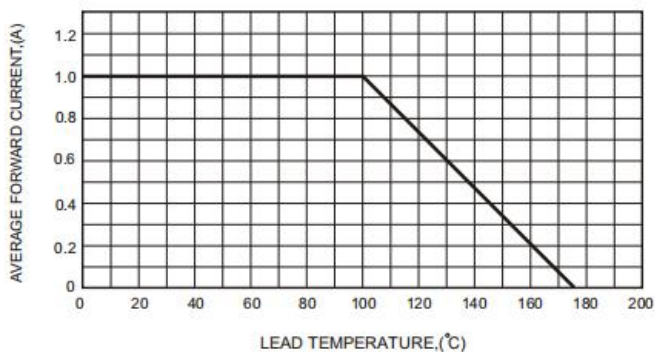


FIG.2-TYPICAL FORWARD CHARACTERISTICS

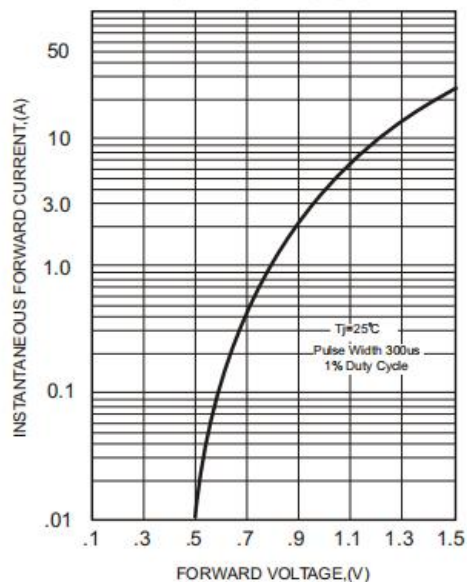


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

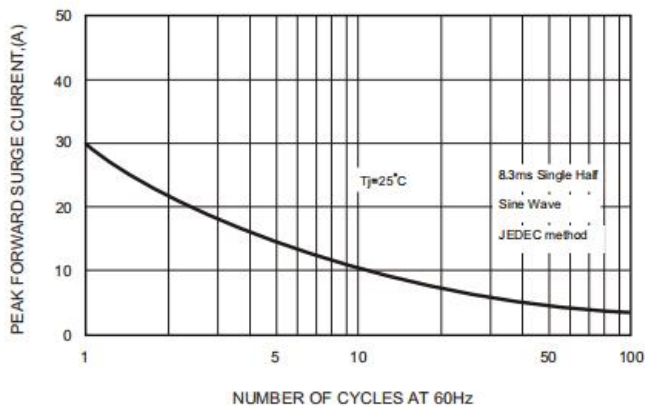


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

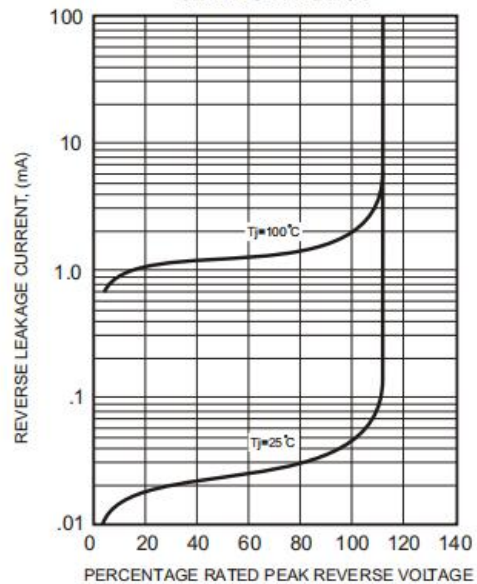
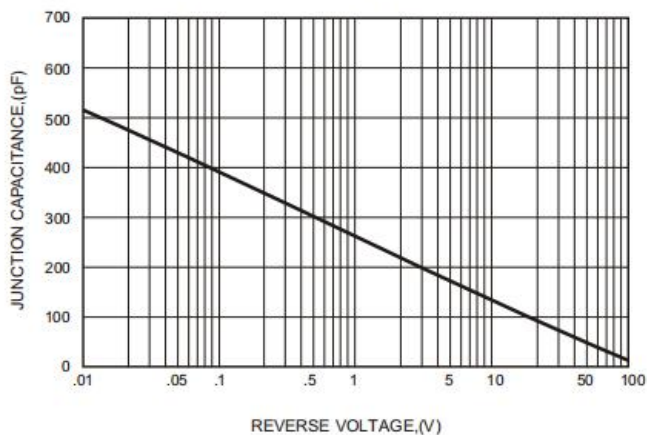


FIG.4-TYPICAL JUNCTION CAPACITANCE



## ■SOD-123FL Dimension 外形封装尺寸

Unit in inches(millimeters) 单位：英寸(毫米)

