

SMB Super Fast Recovery Diode 超快恢复二极管
■Features 特点

Fast Switching Speed 快的开关速度
 Super Fast Recovery time 超快恢复时间
 Glass passivated chip junction 玻璃钝化芯片保护结
 Surface Mount Device 表面贴装器件
 Case 封装:SMB(DO-214AA)


■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	ES 1AB	ES 1BB	ES 1CB	ES 1DB	ES 1EB	ES 1GB	ES 1JB	Unit 单位
Marking 印字		ES 1A	ES 1B	ES 1C	ES 1D	ES 1E	ES 1G	ES 1J	
Repetitive Peak Reverse Voltage 重复峰值反向电压	V_{RRM}	50	100	150	200	300	400	600	V
DC Reverse Voltage 直流反向电压	V_R	50	100	150	200	300	400	600	V
RMS Reverse Voltage 反向电压均方根值	$V_{R(RMS)}$	35	70	105	140	210	280	420	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							A
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	85							$^{\circ}\text{C/W}$
Junction/Storage Temperature 结温/储藏温度	T_J, T_{stg}	$-50\text{to}+150$							$^{\circ}\text{C}$

■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	ES1AB-ES1DB	ES1EB-ES1GB	ES1JB	Unit 单位	Condition 条件
Forward Voltage 正向电压	V_F	0.95	1.25	1.7	V	$I_F=1\text{A}$
Reverse Current 反向电流	I_R	$5(T_A=25^{\circ}\text{C})$ $500(T_A=125^{\circ}\text{C})$			μA	$V_R=V_{RRM}$
Reverse Recovery Time 反向恢复时间	T_{rr}	35			nS	$I_F=0.5\text{A}, I_R=1\text{A}$ $I_{rr}=0.25\text{A}$
Junction Capacitance 结电容	C_J	38			pF	$V_R=4\text{V}, f=1\text{MHz}$

■ Typical Characteristic Curve 典型特性曲线

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

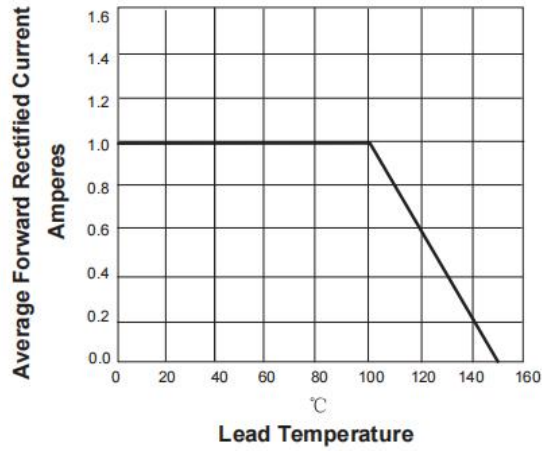


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

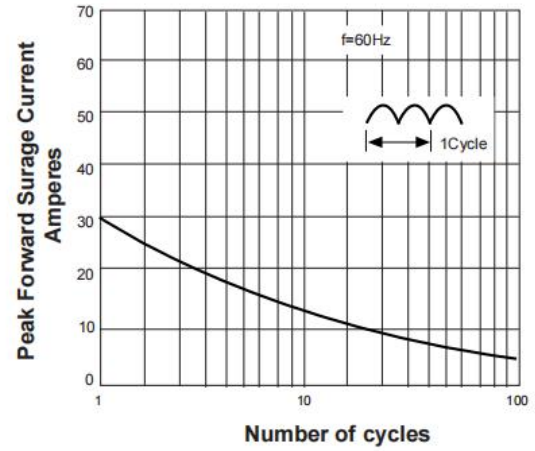


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

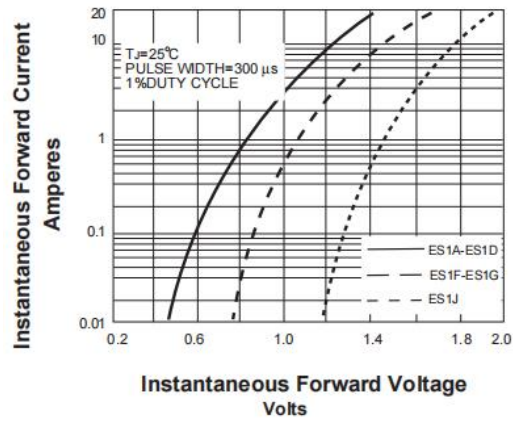
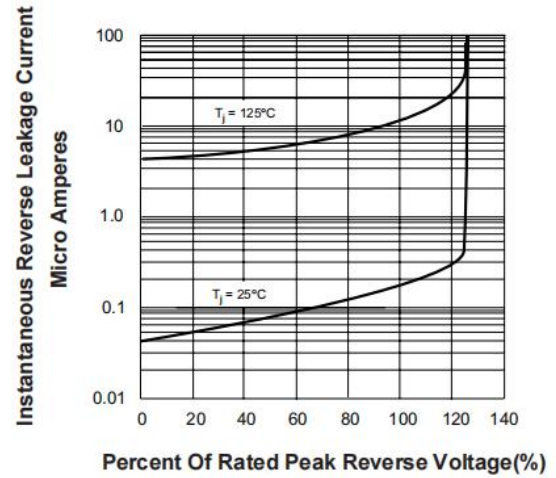
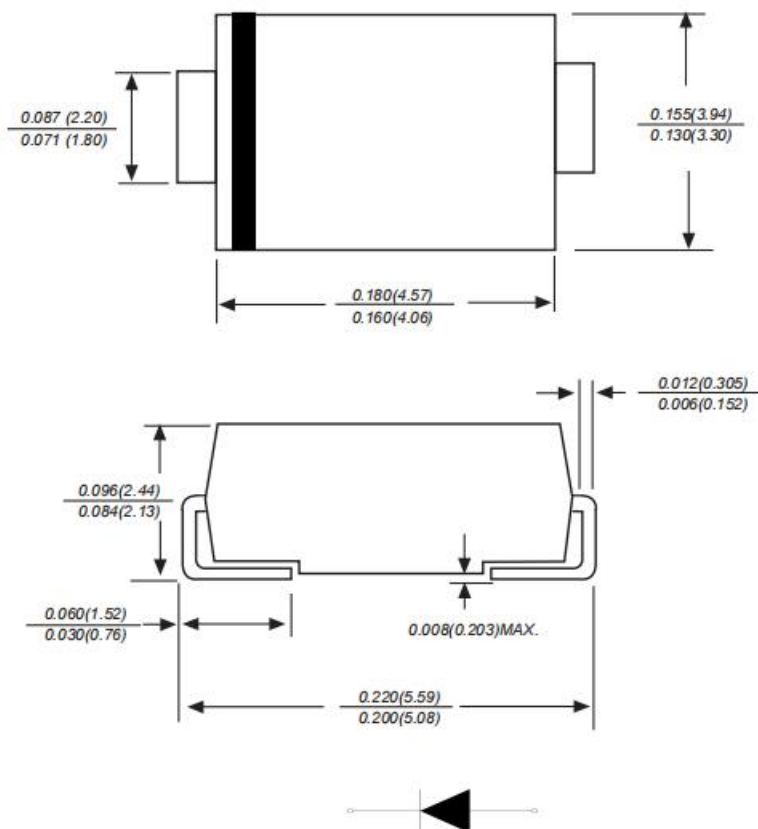


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



■Dimension 外形封装尺寸



Dimensions in inches and (millimeters)