SMAF 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:SMAF

■Maximum Rating 最大额定值

(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃**)**

Characteristic 特性参数	Symbol 符号	ES 2AF	ES 2BF	ES 2CF	ES 2DF	ES 2EF	ES 2GF	ES 2JF	Unit 单位
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	2							A
Peak Surge Current 峰值浪涌电流	I_{FSM}	50							A
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	90							℃/W
Junction/Storage Temperature 结温/储藏温度	T_J, T_{stg}	-50to+150							℃

■Electrical Characteristics 电特性

(T_A=25℃ unless otherwise noted 如无特殊说明，温度为 25℃**)**

Characteristic 特性参数	Symbol 符号	ES2AF-ES2DF	ES2EF-ES2GF	ES2JF	Unit 单位	Condition 条件
Forward Voltage 正向电压	V_F	0.95	1.25	1.7	V	I_F=2A
Reverse Current 反向电流	I_R	5(T_A=25℃) 500(T_A=100℃)			μA	V_R=V_{RRM}
Reverse Recovery Time 反向恢复时间	Trr	35			nS	I_F=0.5A,I_R=1A Irr=0.25A
Junction Capacitance 结电容	C_J	60			pF	V_R=4V,f=1MHz

■Typical Characteristic Curve 典型特性曲线

FIG.1- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

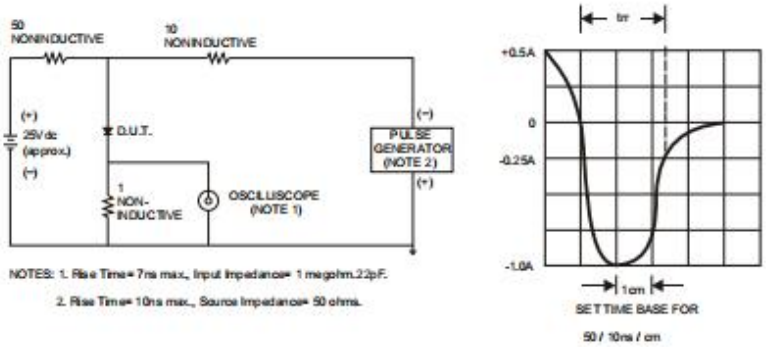


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

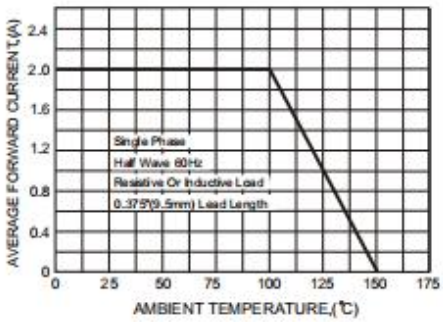


FIG.3-TYPICAL FORWARD CHARACTERISTICS

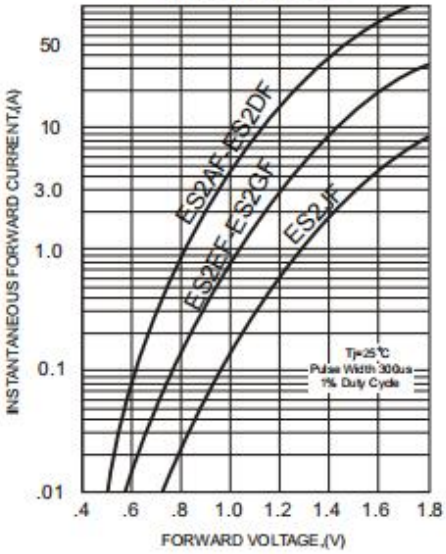


FIG.4-TYPICAL REVERSE CHARACTERISTICS

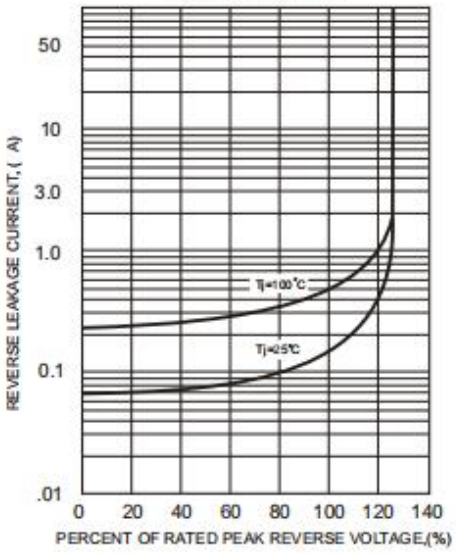


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

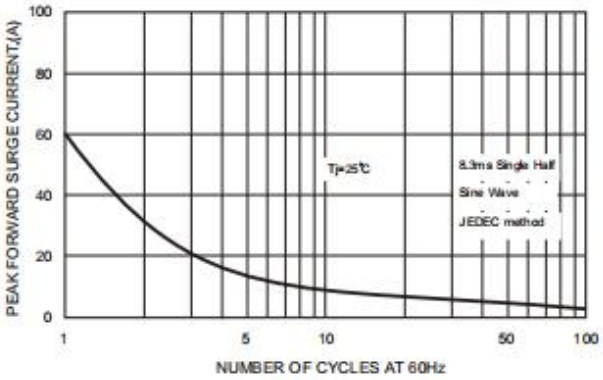
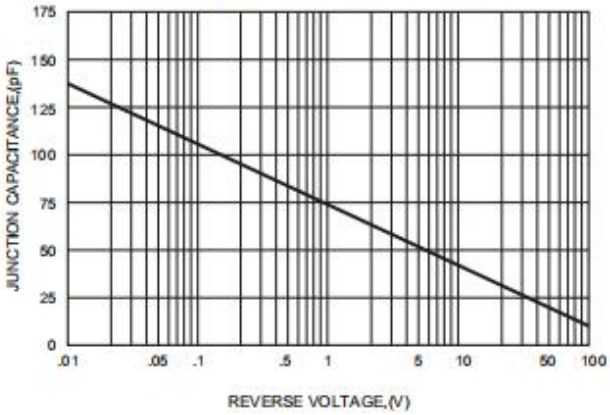
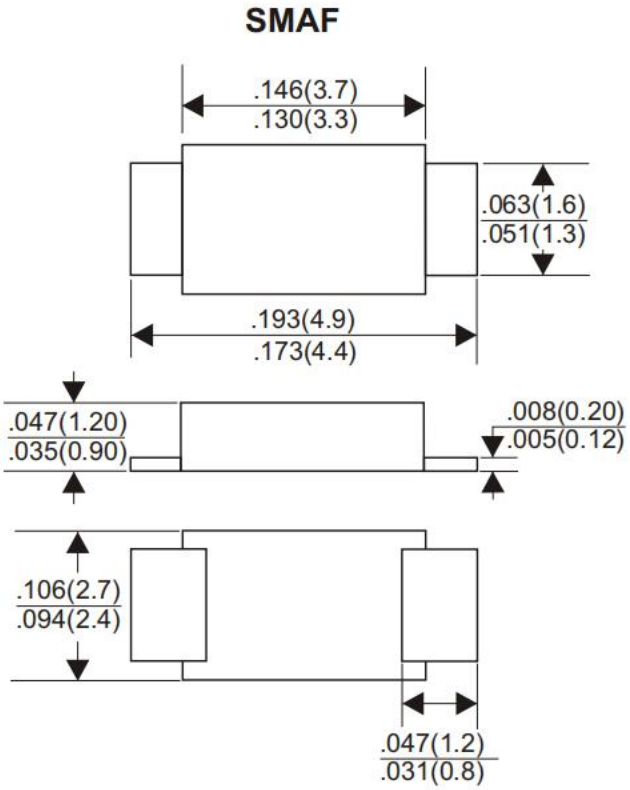


FIG.6-TYPICAL JUNCTION CAPACITANCE



■**Dimension** 外形封装尺寸



Dimensions in inches and (millimeters)