S2ABF~S2MBF

Rev.C Feb.-2015

DATA SHEET

描述 / Descriptions

超快恢复二极管，反向电压：50V~1000V，正向电流：2.0A，薄型 SMBF 封装。
Surface Mount Superfast Recovery Rectifier,Reverse Voltage:50 to1000V,Forward Current:2.0A, SMBF thin package.

特征 / Features

玻璃钝化芯片，反向恢复时间快，无铅符合欧盟 RoHS 指令 2011/65/EU，适用于表面贴装。无卤产品。
Glass Passivated Chip Junction,Fast reverse recovery time,Lead free in comply with EU R0HS 2011/65/EU directives,For surface mounted applications.Halogen free product.

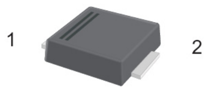
用途 / Applications

一般用途.

General purpose.

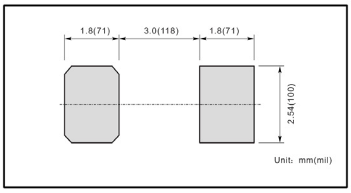
内部等效电路 / Equivalent Circuit

引脚排列 / Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



印章代码 / Marking

见印章说明。See Marking Instructions.

极限参数 / Absolute Maximum Ratings(Ta=25℃)

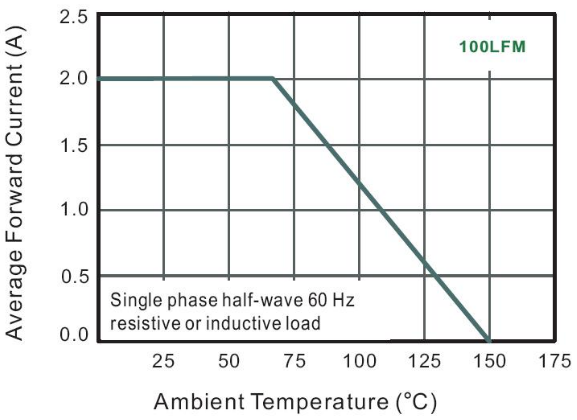
参数 Parameter	符号 Symbol	数值 Rating							单位 Unit
		S2ABF	S2BBF	S2DBF	S2GBF	S2JBF	S2KBF	S2MBF	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_a= 65℃	$I_{F（AV）}$	2.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	60							A
Typical Junction Capacitance 1）	C_j	30							pF
Typical Thermal Resistance 2）	$R_{\theta JA}$	55							℃/W
Operating and Storage Temperature Range	T_j,T_{stg}	-55~+150							℃

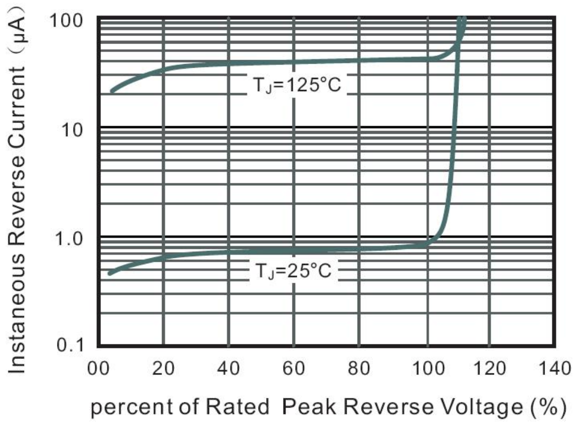
Note:
1）Measured at 1MHz and applied reverse voltage of 4V D.C
2）P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.

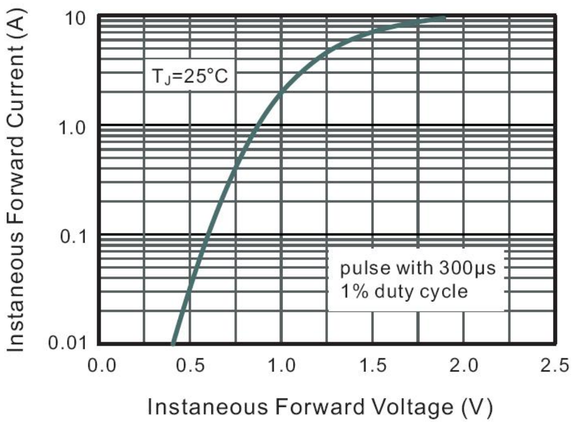
电性能参数 / Electrical Characteristics(Ta=25℃)

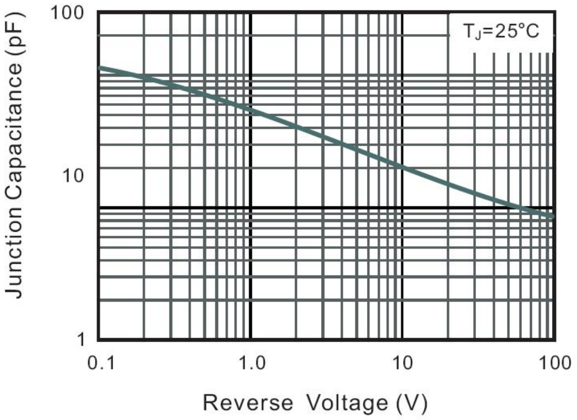
参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating	单位 Unit
Maximum Forward Voltage	V_F	I_F=2.0A	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	T_a=25℃	5.0	μA
		T_a=125℃	100	μA

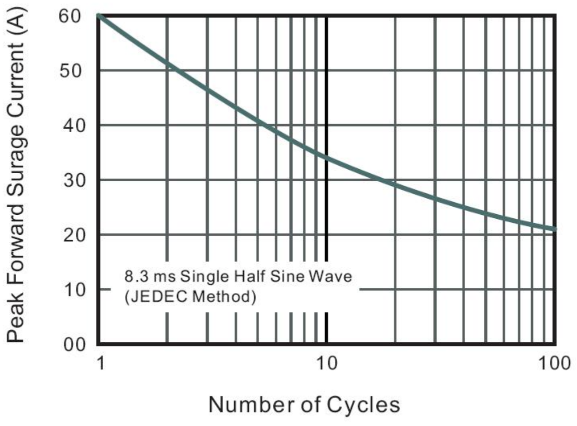
电参数曲线图 / Electrical Characteristic Curve





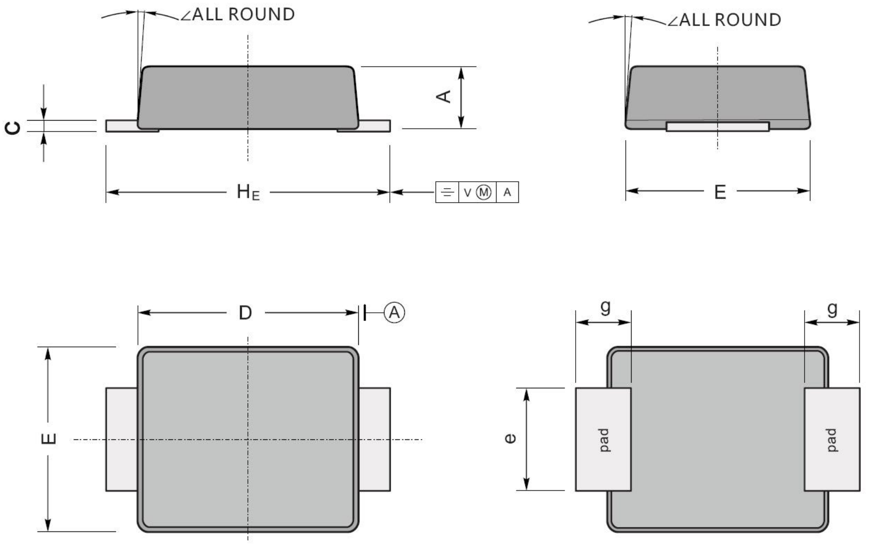






外形尺寸图 / Package Dimensions

SMBF

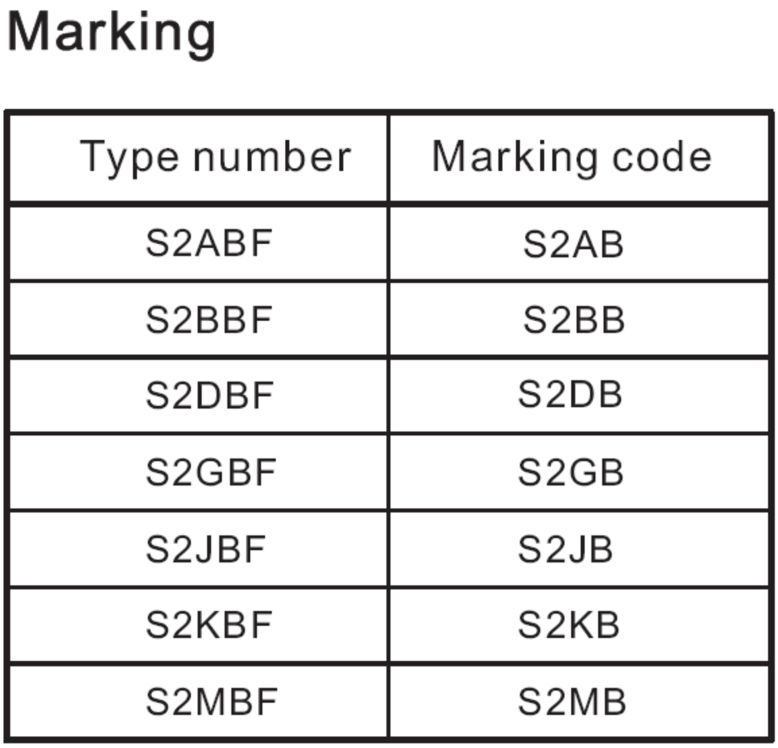


Top View

Bottom View

UNIT		A	C	D	E	H_E	e	g	∠
mm	max	1.3	0.26	4.4	3.7	5.5	2.2	1.0	9°
	min	1.1	0.18	4.2	3.5	5.1	1.9		
mil	max	51	10	173	146	216	86	40	
	min	43	7	165	138	200	75		

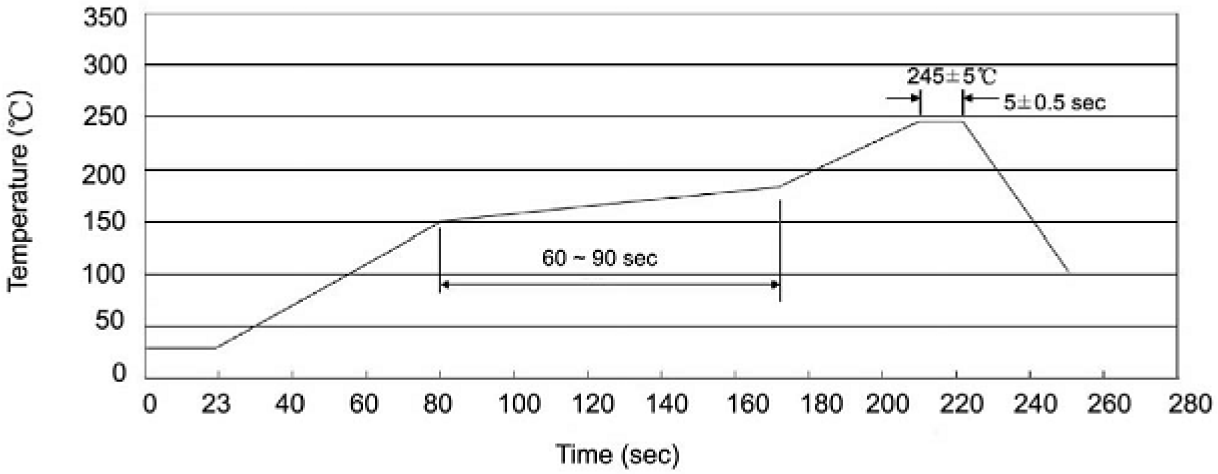
印章说明 / Marking Instructions



Marking

Type number	Marking code
S2ABF	S2AB
S2BBF	S2BB
S2DBF	S2DB
S2GBF	S2GB
S2JBF	S2JB
S2KBF	S2KB
S2MBF	S2MB

回流焊温度曲线图(无铅) / Temperature Profile for IR Reflow Soldering(Pb-Free)



说明：

1、预热温度 25 ~ 150℃，时间 60 ~ 90sec;

2、峰值温度 245±5℃，时间持续为 5±0.5sec;

3、焊接制程冷却速度为 2 ~ 10℃/sec.

Note:

1.Preheating:25~150℃, Time:60~90sec.

2.Peak Temp.:245±5℃, Duration:5±0.5sec.

3. Cooling Speed: 2~10℃/sec.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions

温度：260±5℃　　时间：10±1 sec.

Temp.:260±5℃　　Time:10±1 sec

包装规格 / Packaging SPEC.

卷盘包装 / REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^{3})		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SMBF	5000	2	10000	5	50000	13″ ×15	336X336X40	345X345X235

使用说明 / Notices