

SS52BMA~SS520BMA

Rev.A Nov.-2024

描述 / Descriptions

表面贴装肖特基整流二极管，反向电压：20V~200V，正向电流：5.0A，SMB封装。

Surface Mount Schottky Barrier Rectifiers, Reverse Voltage : 20 to 200V ,Forward Current:5.0A ,SMB package.

特征 / Features

低功耗，高效率，高正向浪涌电流能力，无铅符合欧盟 RoHS 指令 2011/65/EU，适用表面贴装，无卤产品。

Low power loss, high efficiency , High forward surge current capability, Lead free in comply with EU RoHS 2011/65/EU directives, For surface mounted applications, HF Product.

用途 / Applications

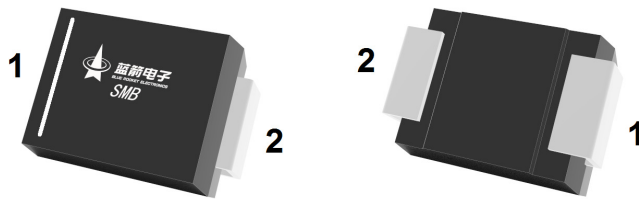
一般用途。

General purpose.

内部等效电路 / Equivalent Circuit

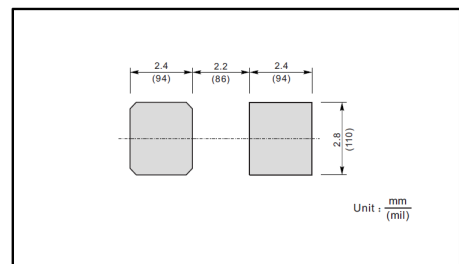


引脚排列 / Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



印章代码 / Marking

见印章说明。

See Marking Instructions.

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DATA SHEET

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

参数 Parameter	符号 Symbol	数值 Rating								单位 Unit
		SS52 BMA	SS54 BMA	SS56 BMA	SS58 BMA	SS510 BMA	SS512 BMA	SS515 BMA	SS520 BMA	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V _{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current @ Fig.1	I _{F(AV)}	5.0								A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	100								A
Peak Forward Surge Current,1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	200								A
I ² t Rating for fusing (3ms ≤t≤8.3ms)	I ² t	41.5								A ² S
Typical Junction Capacitance ⁽¹⁾	C _j	200	160	125	60					pF
Typical Thermal Resistance ⁽²⁾	R _{θJA} R _{θJC} R _{θJL}	43 9 18								°C/W
Operating and Storage Temperature Range	T _j , T _{stg}	-55~+150								°C

Note:

- 1) Measured at 1 MHz and applied reverse voltage of 4 V D.C
- 2) P.C.B. mounted with 1.5" X 1.5" (3.81 X 3.81 cm) copper pad areas.

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

参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating							单位 Unit
			SS52 BMA	SS54 BMA	SS56 BMA	SS58 BMA	SS510 BMA	SS512 BMA	SS515 BMA	
Maximum Instantaneous Forward Voltage	V _F	I _F =5.0A	0.55	0.70	0.85	0.95				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	T _a =25°C	1.0							mA
		T _a =125°C	50							mA

电参数曲线图 / Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

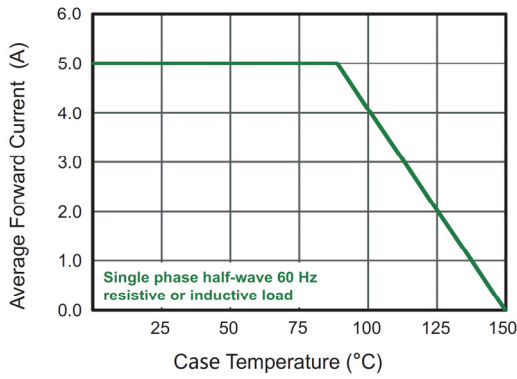


Fig.2 Typical Reverse Characteristics

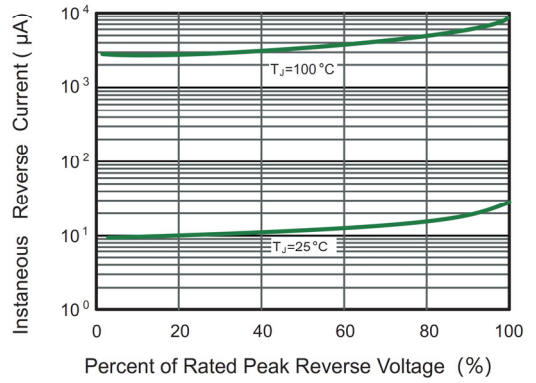


Fig.3 Typical Forward Characteristic

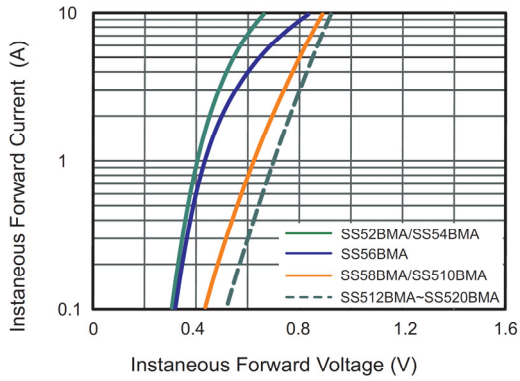


Fig.4 Typical Junction Capacitance

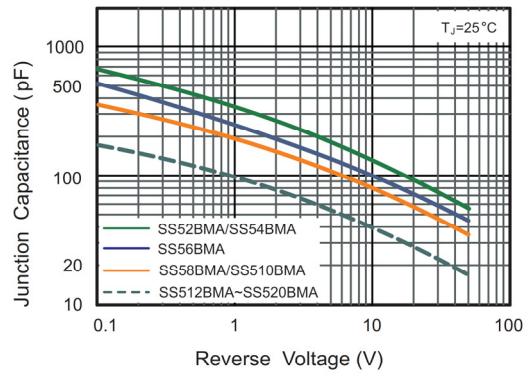
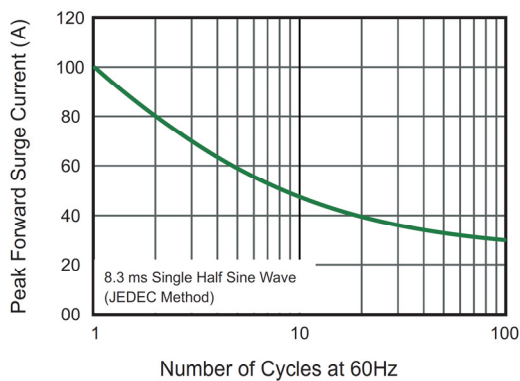
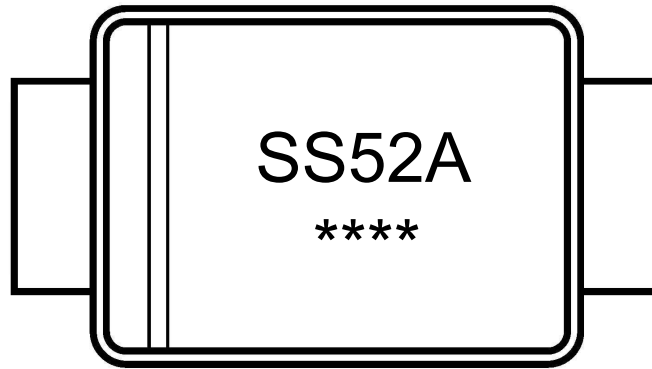


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



印章说明 / Marking Instructions



说明：

SS52A：为型号代码

****：为生产批号代码，随生产批号变化

Note:

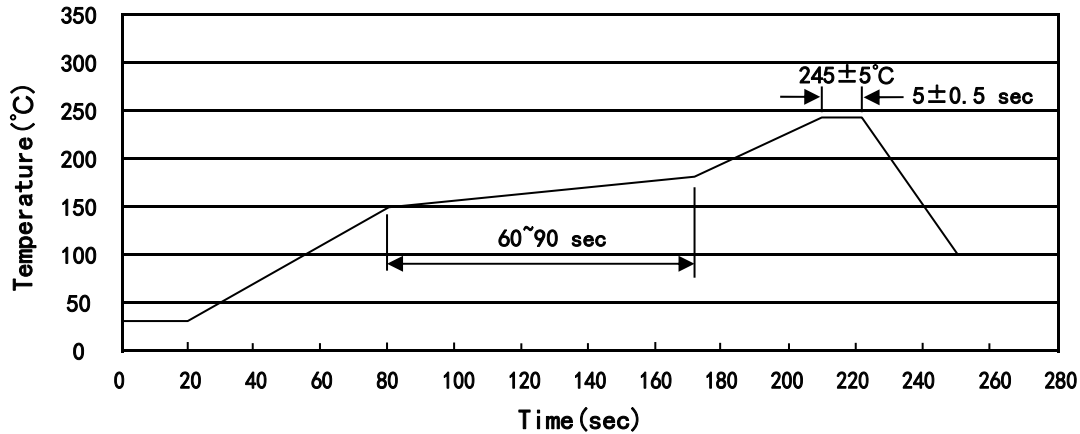
SS52A：Product Type Code

****：Lot No. Code, code change with Lot No

Marking

Type number	Marking code
SS52BMA	SS52A
SS54BMA	SS54A
SS56BMA	SS56A
SS58BMA	SS58A
SS510BMA	SS510A
SS512BMA	SS512A
SS515BMA	SS515A
SS520BMA	SS520A

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 150~180°C，时间 60~90sec;
- 2、峰值温度 245±5°C，时间持续为 5±0.5sec;
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

- 1.Preheating:150~180°C, Time:60~90sec.
- 2.Peak Temp.:245±5°C, Duration:5±0.5sec.
3. Cooling Speed: 2~10°C/sec.

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

温度：260±5°C

时间：10±1 sec.

Temp.:260±5°C

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
SMB	3,000	2	6,000	7	42,000	13" ×12	336X336X40	380X335X366

使用说明 / Notices