

# BRSS12Q~BRSS120Q

Rev.A Sep.-2022

## 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：1.0A，SMA 封装。

Surface Mount Schottky Barrier Rectifiers, Reverse Voltage : 20 to 200V, Forward Current: 1.0A ,SMA package.

## 特征 / Features

玻璃钝化芯片，无铅符合欧盟 RoHS 指令 2011/65/EU，适用表面贴装，符合 AEC-Q101 标准高可靠性要求，无卤产品。

Glass Passivated Chip Junction, Lead free in comply with EU RoHS 2011/65/EU directives, For surface mounted applications, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

## 用途 / Applications

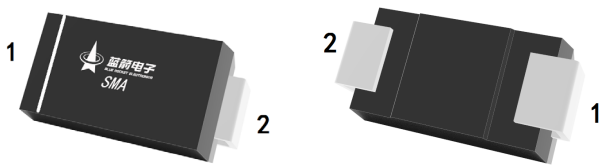
一般用途，满足汽车应用的严格要求。

General purpose, Meet the stringent requirements of automotive applications.

## 内部等效电路 / Equivalent Circuit

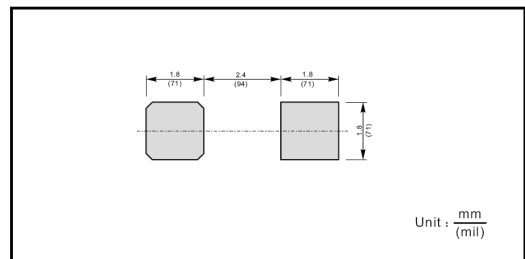


## 引脚排列 / Pinning



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°C)**

参数 Parameter	符号 Symbol	数值 Rating								单位 Unit
		BRSS12Q	BRSS14Q	BRSS16Q	BRSS18Q	BRSS110Q	BRSS112Q	BRSS115Q	BRSS120Q	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V <sub>RMS</sub>	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current T <sub>c</sub> =100°C	I <sub>F(AV)</sub>	1.0								A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	25								A
Typical Junction Capacitance at V <sub>R</sub> =4V f=1MHz	C <sub>j</sub>	110		80						pF
Typical Thermal Resistance <sup>1)</sup>	R <sub>θJA</sub> R <sub>θJC</sub>	90 15								°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55~+150								°C

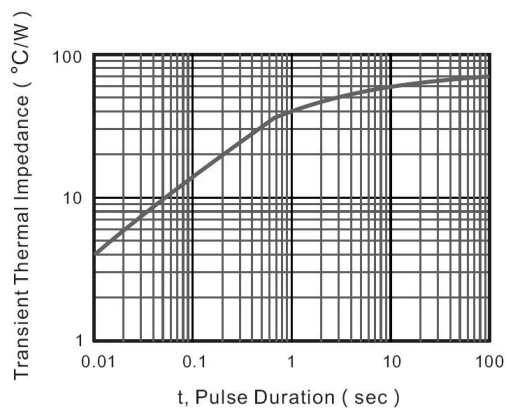
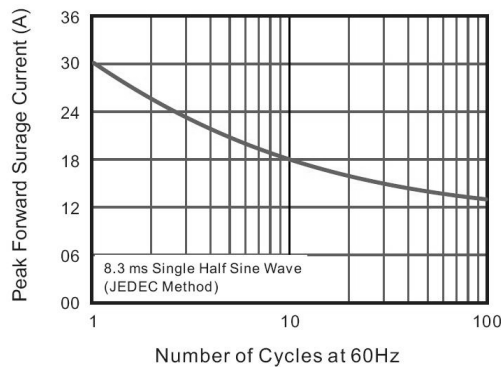
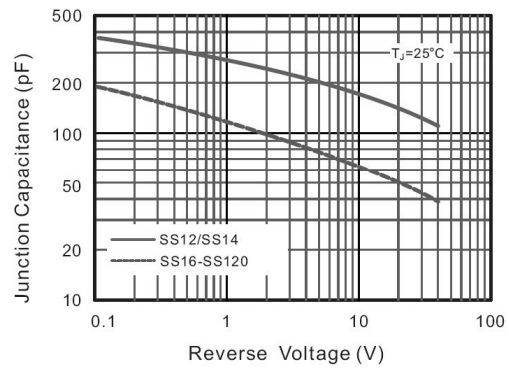
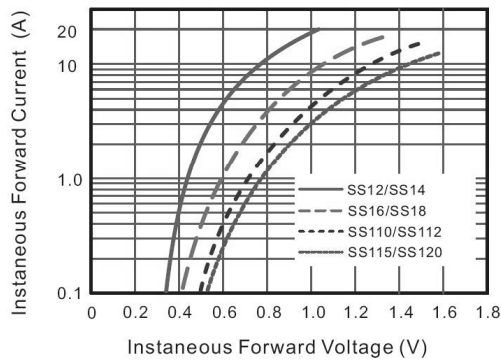
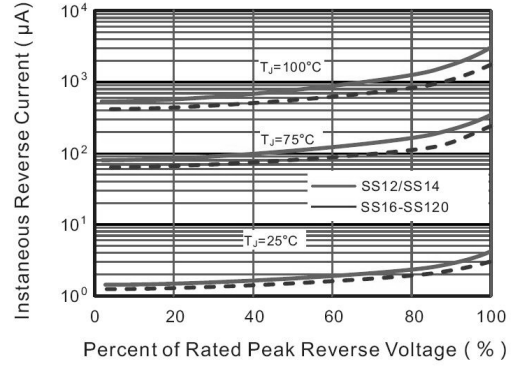
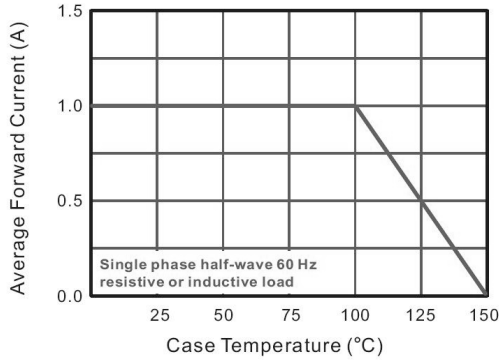
Note:

1) P.C.B. mounted with 2.0 X 2.0" (5 X5 cm) copper pad areas.

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

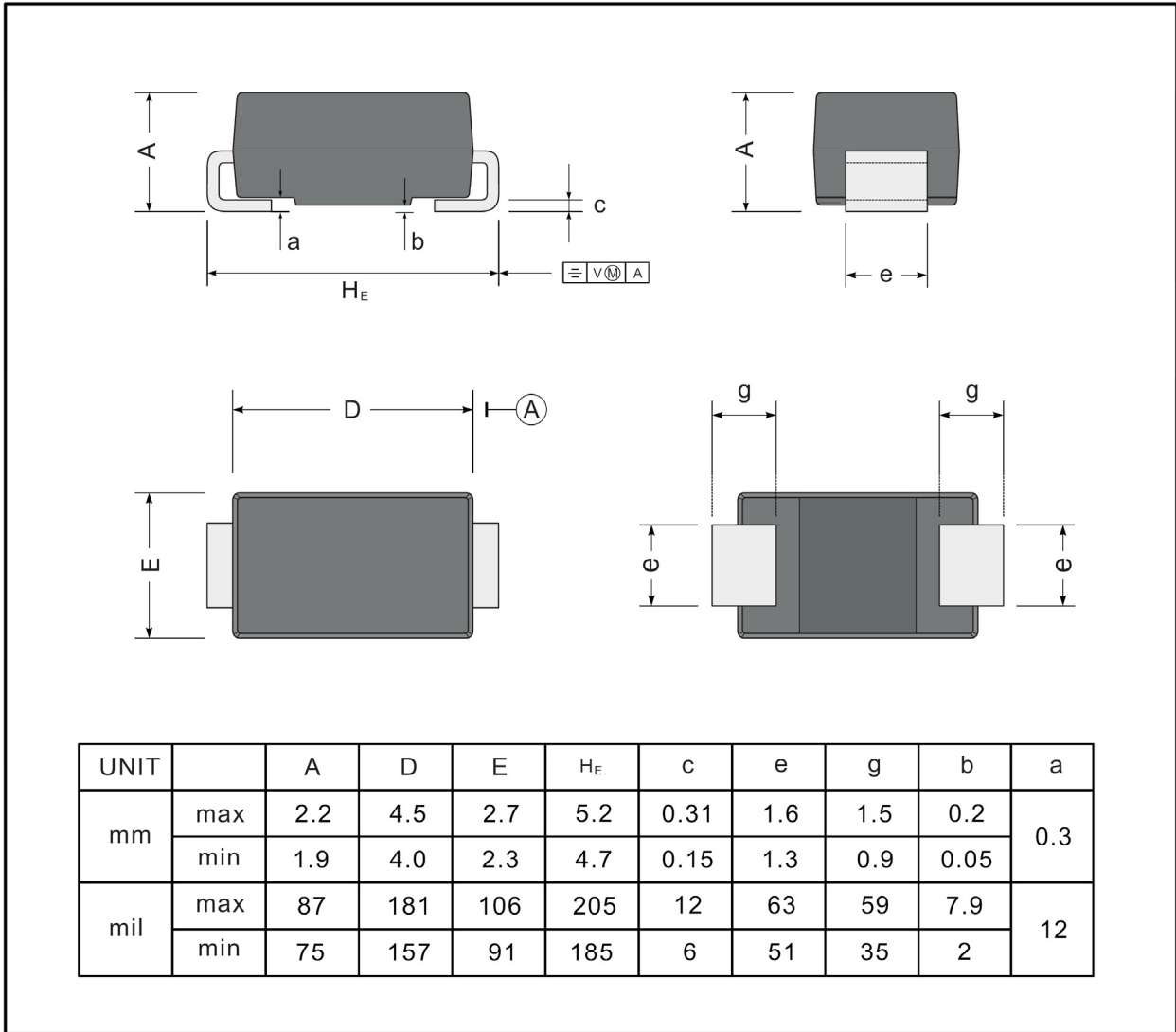
参数 Parameter	符号 Symbol	测试条件 Test Conditions	数值 Rating							单位 Unit
			BRSS12Q	BRSS14Q	BRSS16Q	BRSS18Q	BRSS110Q	BRSS112Q	BRSS115Q	
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1.0A	0.55		0.70	0.85		0.90		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	T <sub>a</sub> =25°C	0.3		0.2		0.1		mA	
		T <sub>a</sub> =100°C	10		5.0		2.0		mA	

电参数曲线图 / Electrical Characteristic Curve

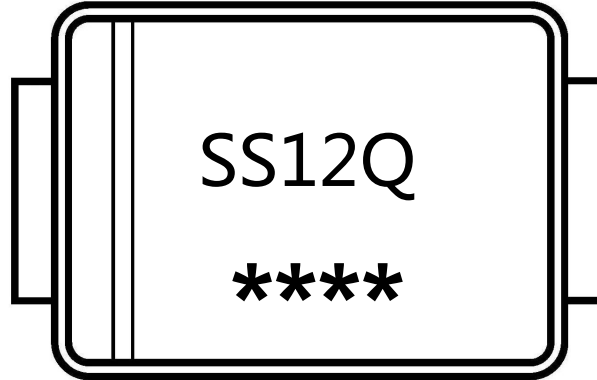


外形尺寸图 / Package Dimensions

SMA



印章说明 / Marking Instructions



说明：

SS12： 为型号代码

Q： 为汽车无卤产品标识

\*\*\*\*： 为生产批号追溯码，第 1 个\*为年月代码，后面 3 个\*为当月小批号代码

Note:

SS12： Product Type Code

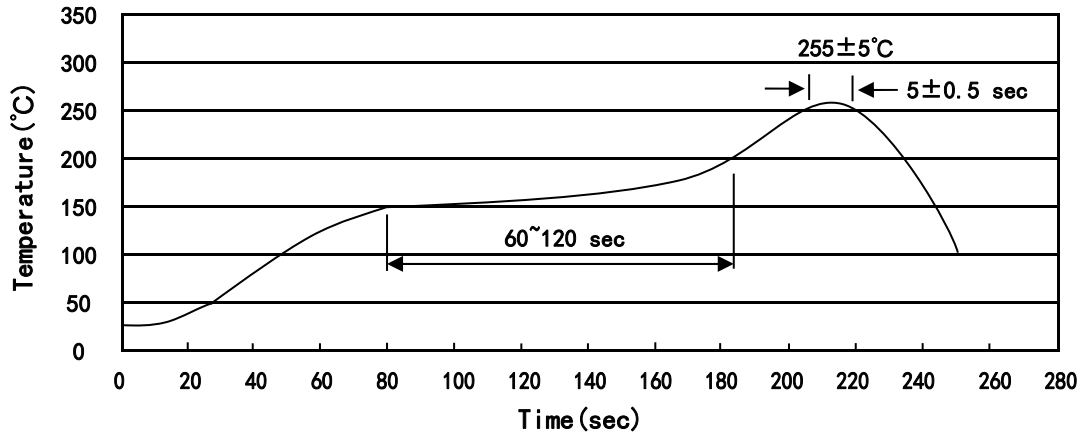
Q: Automobile halogen-free product Code

\*\*\*\*： Lot No. Code ,The 1st \* means:YM Code ,The last 3 \* means:little Lot No Code

### Marking

Type number	Marking code
BRSS12Q	SS12Q
BRSS14Q	SS14Q
BRSS16Q	SS16Q
BRSS18Q	SS18Q
BRSS110Q	SS110Q
BRSS112Q	SS112Q
BRSS115Q	SS115Q
BRSS120Q	SS120Q

**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 ~ 200°C，时间 60 ~ 120sec;
- 2、峰值温度 255±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:150~200°C, Time:60~120sec.
- 2.Peak Temp.:255±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 <sup>3</sup> )		
	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
SMA	5000	2	10000	7	70000	13" × 12	336X336X40	380X335X366

**使用说明 / Notices**