

**描述 / Descriptions**

表面贴装肖特基整流二极管，反向电压：60V，正向电流：5.0A，SMB封装。

Surface Mount Schottky Barrier Rectifiers, Reverse Voltage : 60V, Forward Current: 5.0A, SMB package.

**特征 / Features**

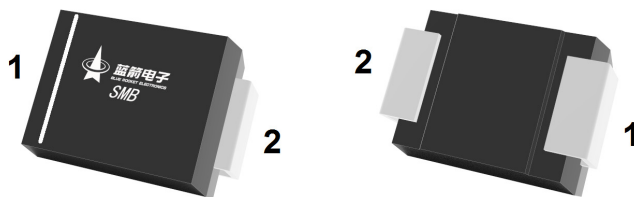
低功耗，高效率，高正向浪涌电流能力，无铅符合欧盟 RoHS 指令 2011/65/EU，适用表面贴装，符合 AEC-Q101 标准高可靠性要求，无卤产品。

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, Qualified to AEC-Q101 Standards for High Reliability, HF product.

**用途 / Applications**

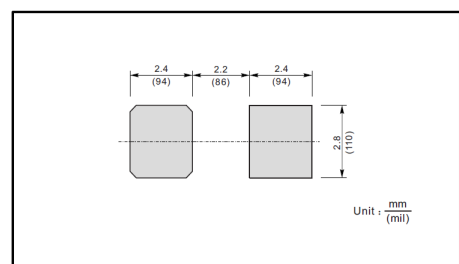
一般用途，满足汽车应用的严格要求。

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
		BRSS56BQ	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	60	V
Maximum RMS voltage	$V_{RMS}$	42	V
Maximum DC Blocking Voltage	$V_{DC}$	60	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	120	A
Typical Junction <sup>1</sup> Capacitance at	$C_j$	96	pF
Typical Thermal Resistance <sup>2</sup>	$R_{\theta JA}$	65	°C/W
	$R_{\theta JC}$	25	
	$R_{\theta JL}$	15	
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 with 5×5mm copper pads,2 OZ,FR4 PCB

**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
			BRSS56BQ	
Maximum Instantaneous Forward Voltage	$V_F$	$I_F=5.0A$	0.67	V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	$I_R$	$T_a=25^\circ C$	0.15	mA
		$T_a=125^\circ C$	15	mA

**电参数曲线图 / Electrical Characteristic Curve**

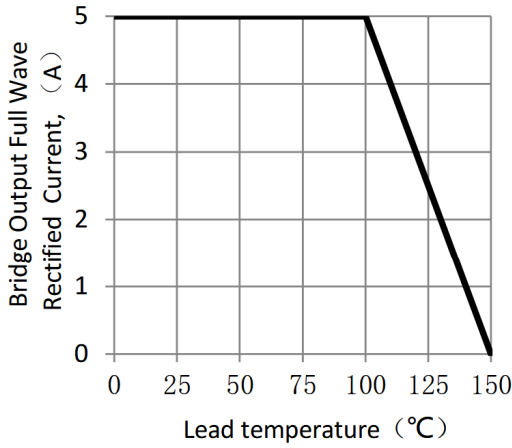


Figure 1. Forward Current Derating Curve

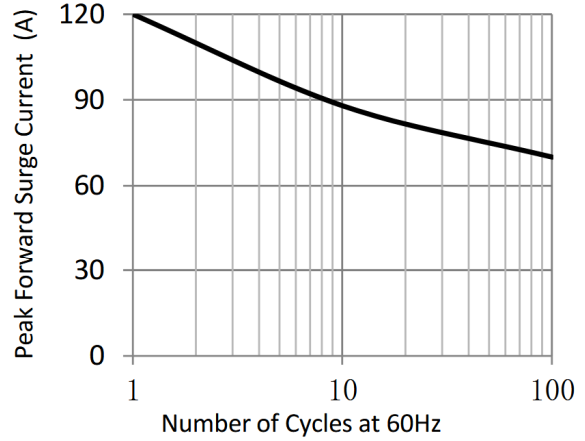


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

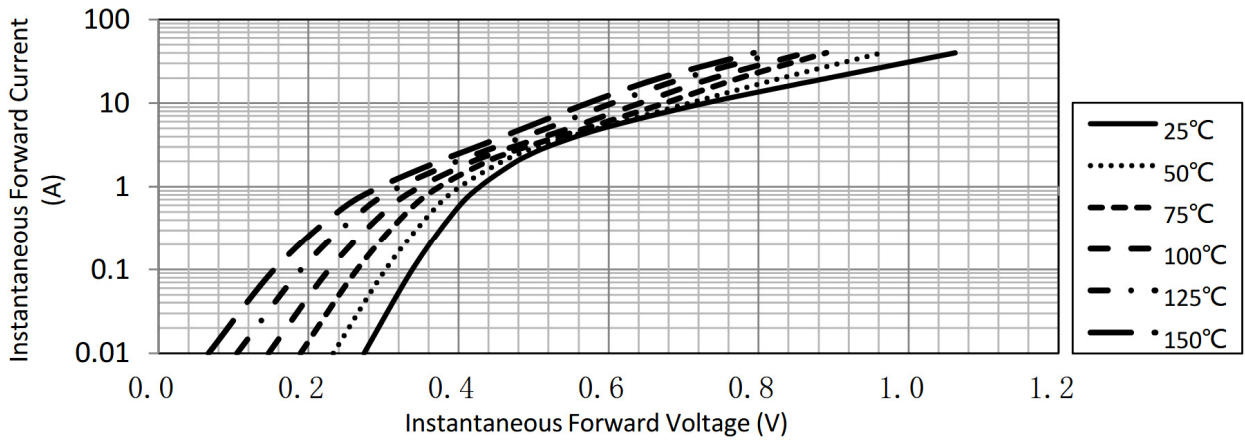


Figure 5. Typical Instantaneous Forward Characteristics

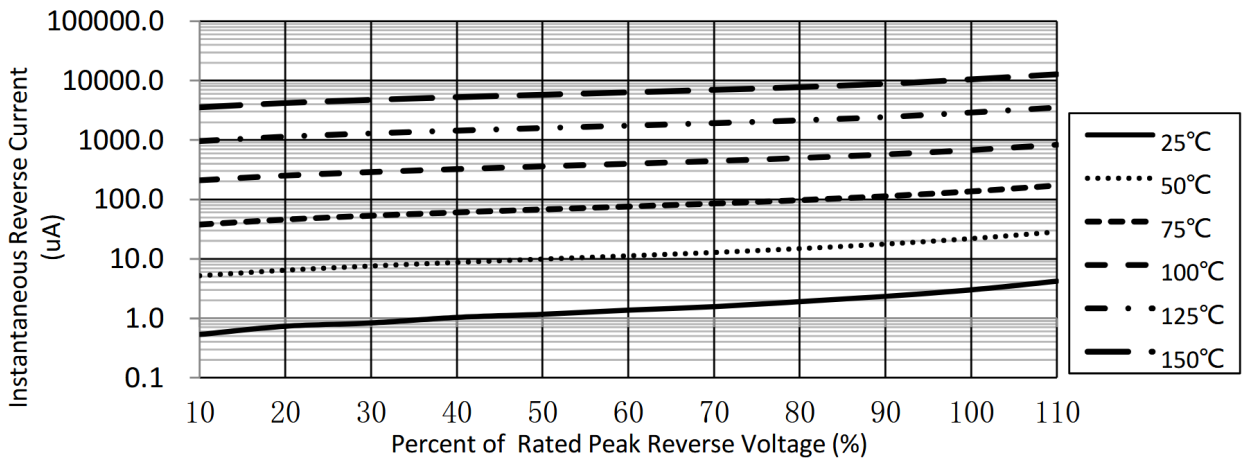
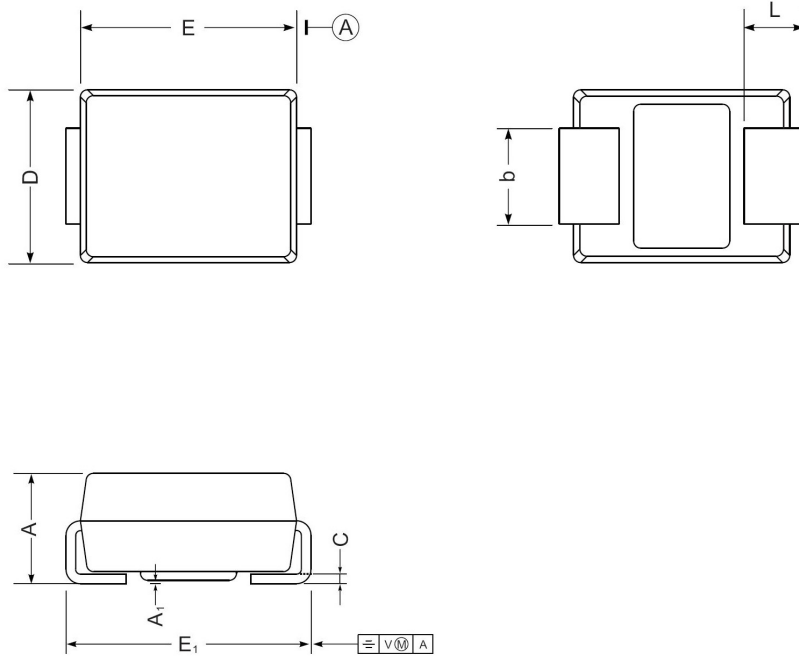


Figure 6. Typical Reverse Characteristics

外形尺寸图 / Package Dimensions

SMB



SMB mechanical data

UNIT		A	E	D	E <sub>1</sub>	A <sub>1</sub>	L	C	b
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.2
	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
mil	max	96	185	155	220	7.9	59	12	87
	min	84	160	130	200	2.0	32	6	75

印章说明 / Marking Instructions



说明：

ASK56： 为型号代码

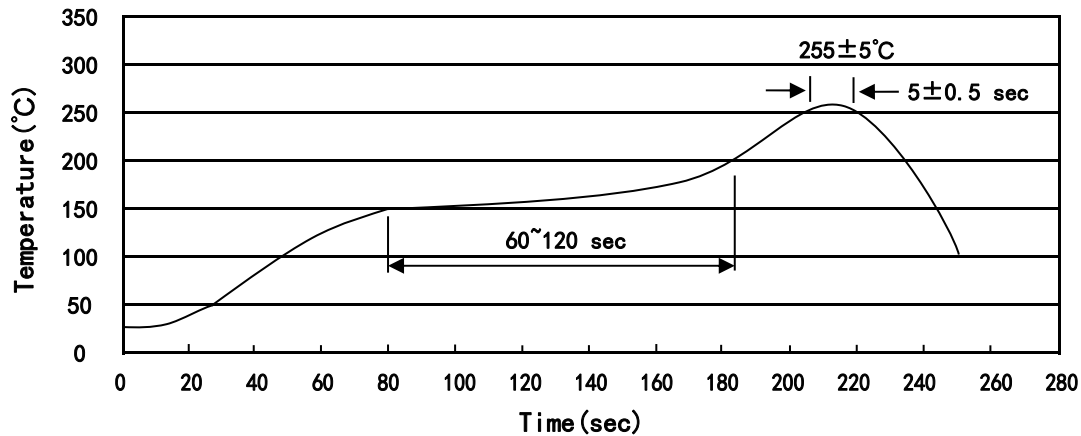
\*\*： 为生产批号代码，随生产批号变化

Note:

ASK56： Product Type Code

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

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

使用说明 / Notices