

描述 / Descriptions

SOT-23塑封封装 肖特基二极管。Schottky barrier diodes in a SOT-23 Plastic Package.

特征 / Features

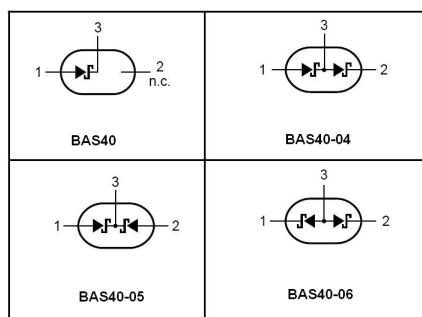
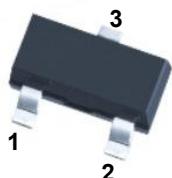
正向开启电流小，低电容二极管，小型片式封装。

Low forward current, Low diode capacitance, small plastic SMD package.

用途 / Applications

用于超高速开关、电压钳位、保护电路。

Ultra high-speed switching, voltage clamping, protection circuits.

内部等效电路 / Equivalent Circuit**引脚排列 / Pinning**

PIN: See Equivalent Circuit.

放大及印章代码 / h_{FE} Classifications & Marking

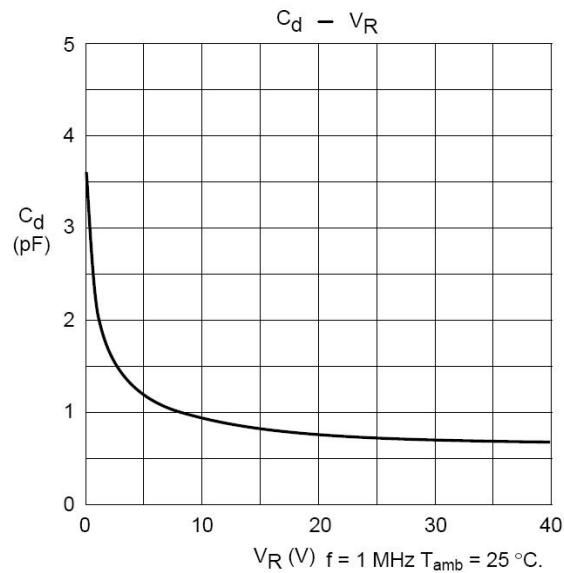
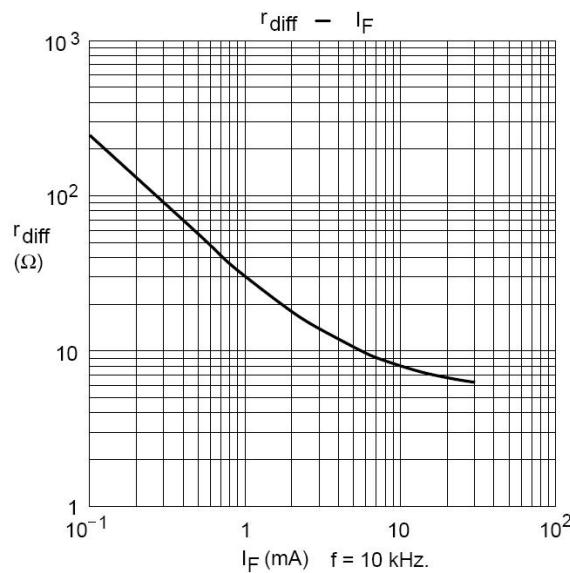
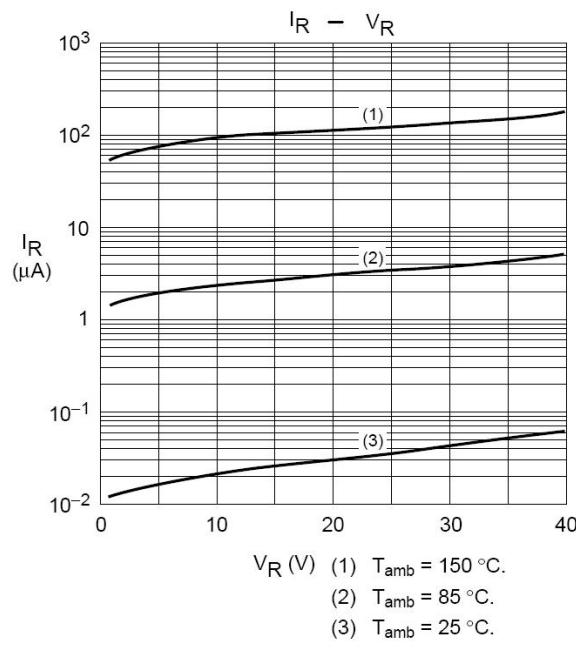
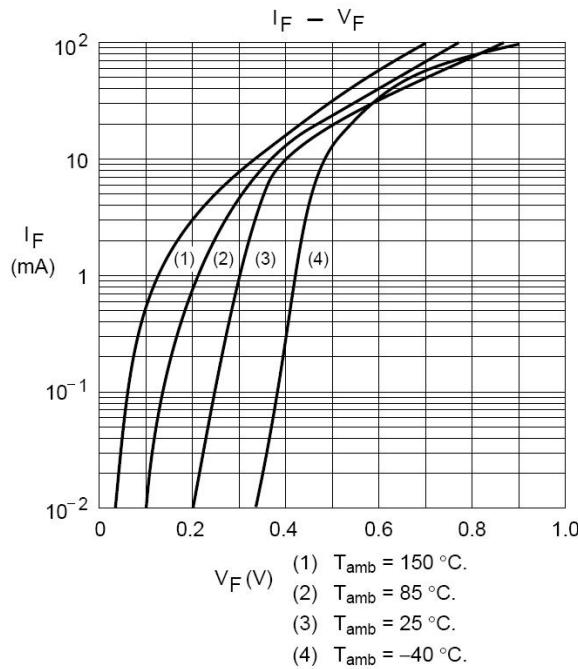
| Type | BAS40 | BAS40-04 | BAS40-05 | BAS40-06 |
|---------|-------|----------|----------|----------|
| Marking | H43 | H44 | H45 | H46 |

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

| 参数 Parameter | 符号 Symbol | 数值 Rating | 单位 Unit |
|---|------------------------------------|--------------|------------|
| Repetitive Reverse Voltage | V _R | 40 | V |
| Average Rectified Forward Current | I _F | 120 | mA |
| Repetitive Peak Forward Surge Current | I _{FRM} ($t_p \leq 1s$) | 120 | mA |
| Non-repetitive Peak Forward Surge Current | I _{FSM} ($t_p < 10ms$) | 100 | mA |
| Thermal Resistance From Junction to Ambient | R _{θJA} | 500 | K/W |
| Junction Temperature | T _j | 150 | °C |
| Storage Temperature Range | T _{stg} | -55~150 | °C |

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

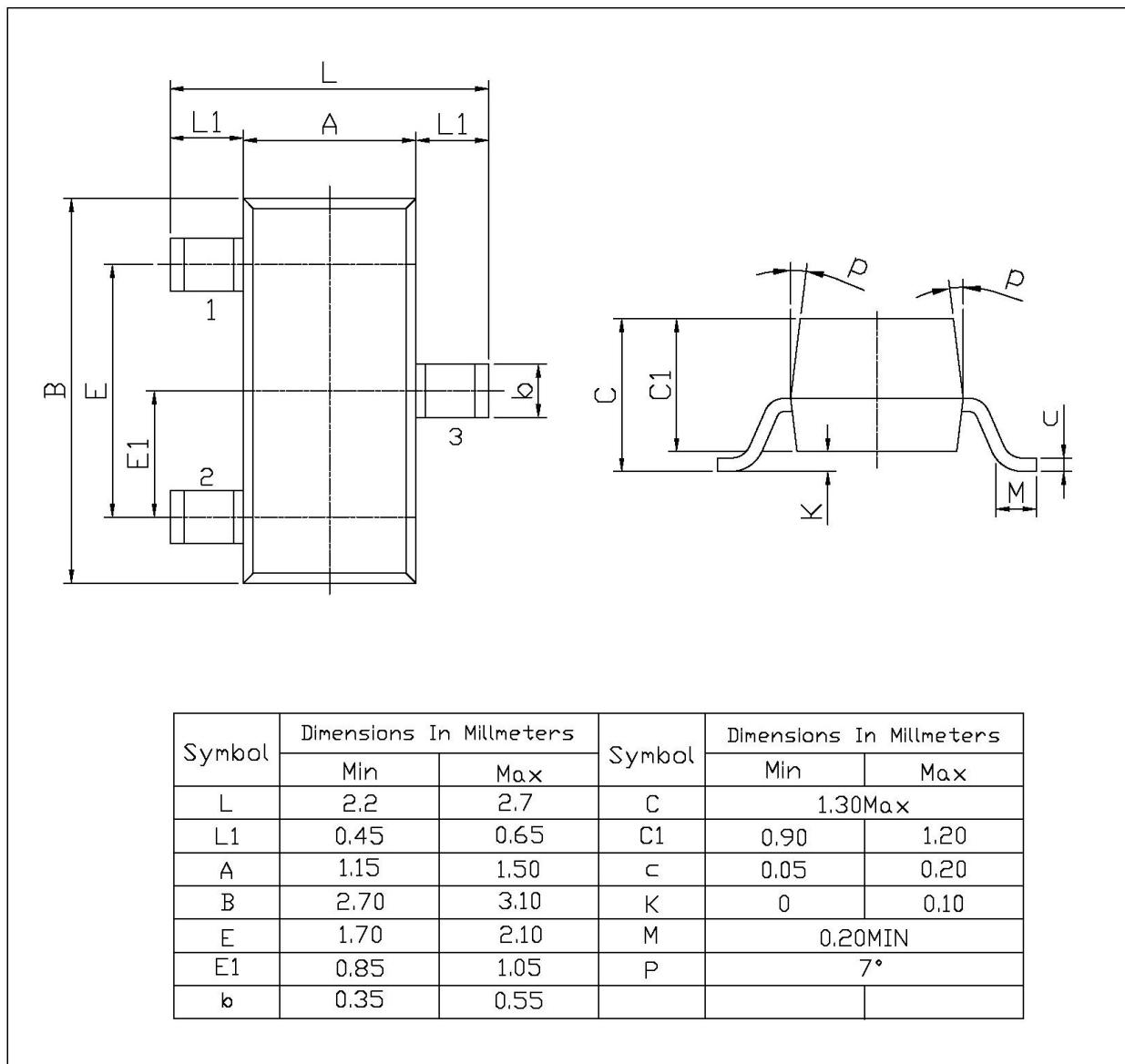
| 参数 Parameter | 符号 Symbol | 测试条件 Test Conditions | 最小值 Min | 典型值 Typ | 最大值 Max | 单位 Unit |
|-------------------------------|----------------|--------------------------|------------|------------|------------|------------|
| Forward Voltage | V _F | I _F =1mA | | | 380 | mV |
| | | I _F =10mA | | | 500 | mV |
| | | I _F =40mA | | | 1.0 | V |
| Instantaneous Reverse Current | I _R | V _R =30V | | | 1.0 | μA |
| | | V _R =40V | | | 10 | μA |
| Diode Capacitance | C _d | V _R =0 f=1MHz | | | 5 | pF |

电参数曲线图 / Electrical Characteristic Curve


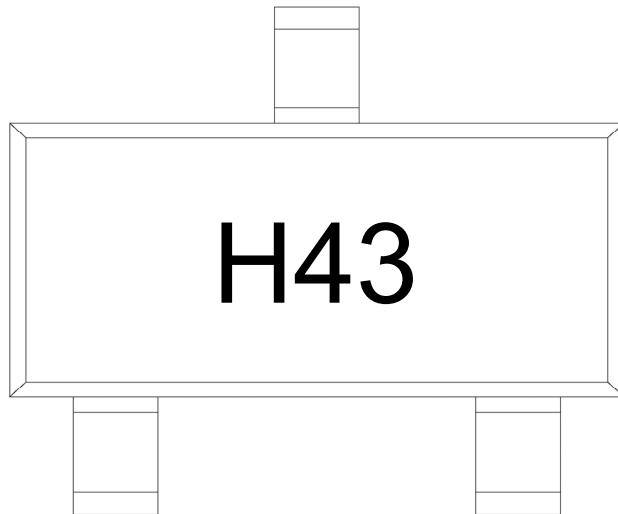
外形尺寸图 / Package Dimensions

SOT-23

单位: mm



印章说明 / Marking Instructions



说明：

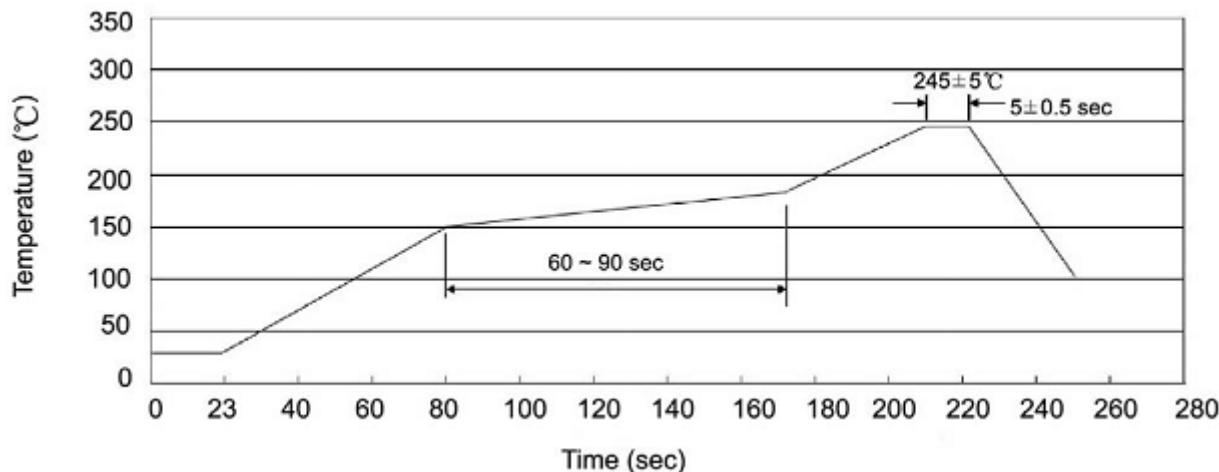
H : 为公司代码

43 : 为型号代码

Note:

H: Company Code.

43: Product Type.

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 $25 \sim 150^\circ\text{C}$, 时间 $60 \sim 90\text{sec}$;
- 2、峰值温度 $245 \pm 5^\circ\text{C}$, 时间持续为 $5 \pm 0.5\text{sec}$;
- 3、焊接制程冷却速度为 $2 \sim 10^\circ\text{C/sec}$.

Note:

- 1.Preheating: $25\sim150^\circ\text{C}$, Time: $60\sim90\text{sec}$.
- 2.Peak Temp.: $245\pm5^\circ\text{C}$, Duration: $5\pm0.5\text{sec}$.
3. Cooling Speed: $2\sim10^\circ\text{C/sec}$.

耐焊接热试验条件 / Resistance to Soldering Heat Test Conditions
温度 : $260 \pm 5^\circ\text{C}$ 时间 : $10 \pm 1 \text{ sec}$.Temp.: $260 \pm 5^\circ\text{C}$ Time: $10 \pm 1 \text{ sec}$
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 |
| SOT-23 | 3,000 | 10 | 30,000 | 8 | 240,000 | 7" x8 | 180x120x180 | 385x257x392 |

使用说明 / Notices