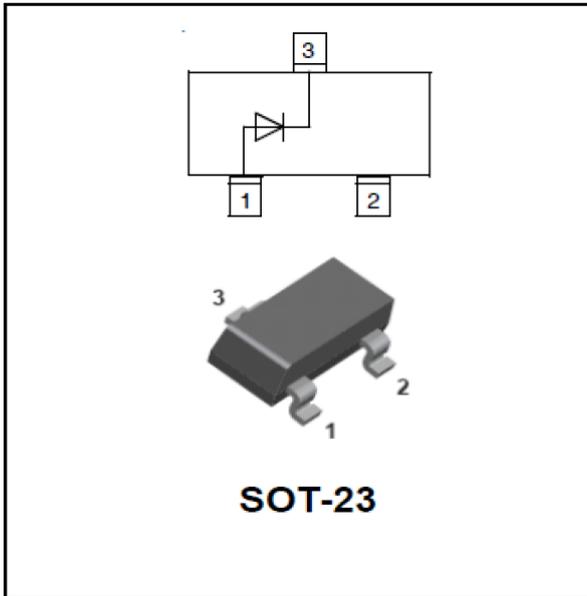


## Schottky Rectifier



### Features

- VR 40V
- IF 0.5A
- For Surface Mount Application and High Current Capability
- Low Forward Voltage Drop

### Mechanical Data

- **Package:** SOT-23
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** L61

### ■ Maximum Rating, ( $T_a=25^\circ\text{C}$ Unless otherwise specified)

| Item   | Symbol     | Unit                      | Value       |
|--|------------|---------------------------|-------------|
| Peak Reverse Voltage                         | $V_{RRM}$  | V                         | 40          |
| Reverse Voltage                              | $V_R$      | V                         | 40          |
| Forward Continuous Current                   | $I_F$      | mA                        | 500         |
| Peak Forward Surge Current @ 8.3ms Half Sine | $I_{FSM}$  | A                         | 5           |
| Power Dissipation                            | $P_D$      | mW                        | 350         |
| Thermal Resistance, Junction to Ambient      | $R_{thJA}$ | $^\circ\text{C}/\text{W}$ | 286         |
| Storage Temperature                          | $T_{STG}$  | $^\circ\text{C}$          | -55 to +150 |
| Operating Junction Temperature               | $T_j$      | $^\circ\text{C}$          | 125         |

### ■ Ordering Information (Example)

| PREFERRED P/N | PACKING CODE | UNIT WEIGHT(g)    | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---------------|--------------|-------------------|----------------------|-------------------------|----------------------------|---------------|
| BAT720        | F2           | Approximate 0.009 | 3000                 | 30000                   | 120000                     | 7" reel       |

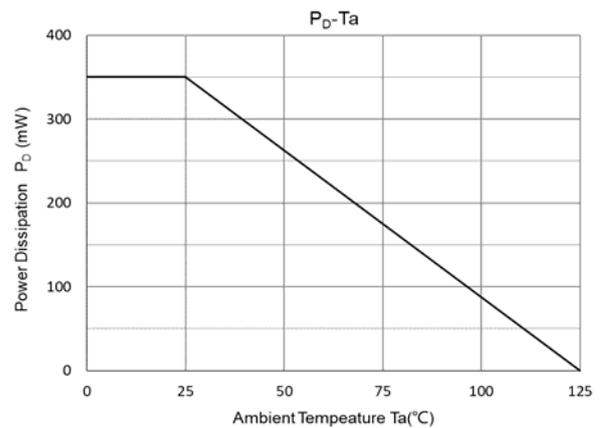
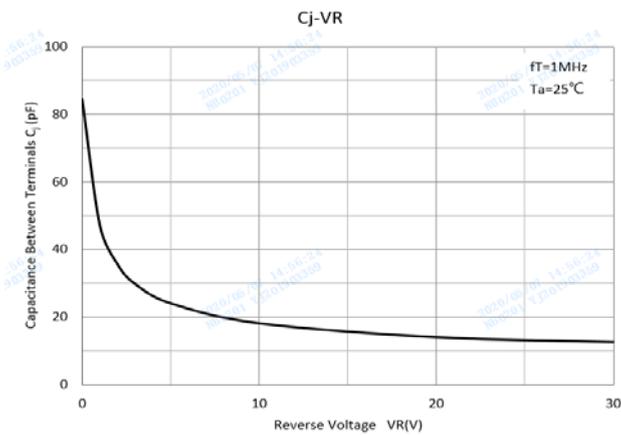
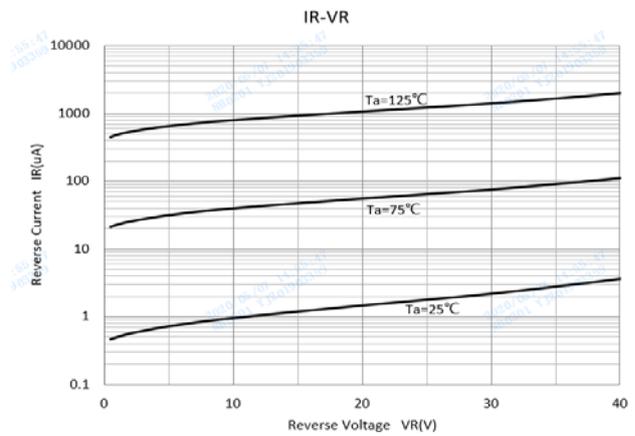
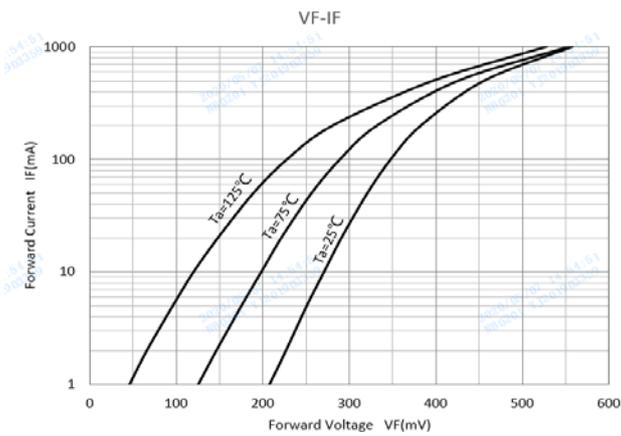


# BAT720

## ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified, Per Leg)

| Item                                  | Symbol          | Unit | Conditions            | Value |
|---------------------------------------|-----------------|------|-----------------------|-------|
| Reverse Voltage                       | V <sub>R</sub>  | V    | I <sub>R</sub> =100uA | 40    |
| Maximum Instantaneous Forward Voltage | V <sub>F1</sub> | V    | I <sub>F</sub> =0.5A  | 0.55  |
|                                       | V <sub>F2</sub> | V    | I <sub>F</sub> =1A    | 0.65  |
| Maximum DC Reverse Current            | I <sub>R1</sub> | uA   | V <sub>R</sub> =20V   | 10    |
|                                       | I <sub>R2</sub> | uA   | V <sub>R</sub> =40V   | 20    |

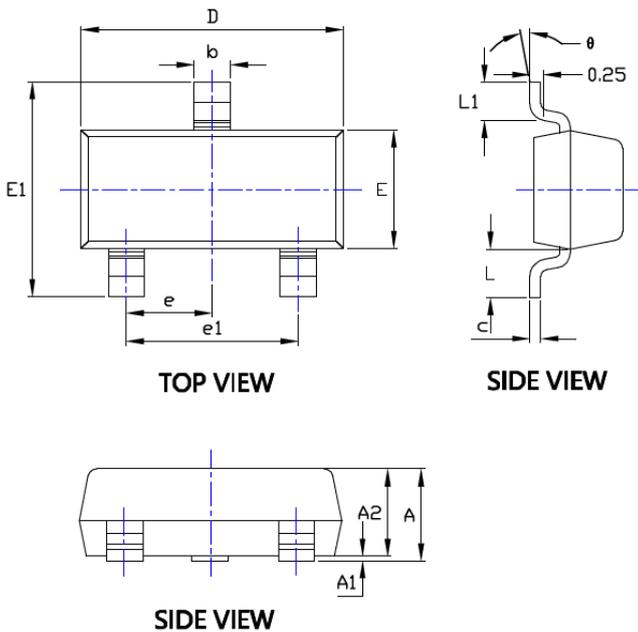
## ■ Typical Characteristics





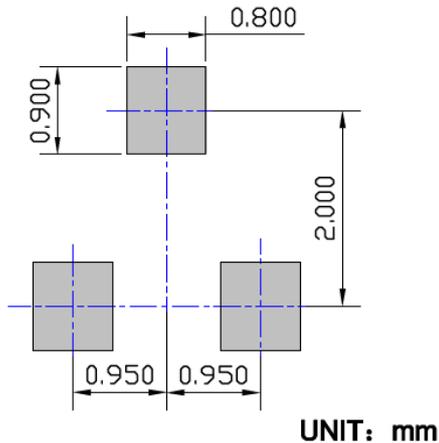
# BAT720

## ■SOT-23 Package Outline Dimensions



| SYMBOL   | DIMENSIONS |       |            |       |
|----------|------------|-------|------------|-------|
|          | INCHES     |       | Millimeter |       |
|          | MIN.       | MAX.  | MIN.       | MAX.  |
| A        | 0.035      | 0.045 | 0.900      | 1.150 |
| A1       | 0.000      | 0.004 | 0.000      | 0.100 |
| A2       | 0.035      | 0.041 | 0.900      | 1.050 |
| b        | 0.012      | 0.020 | 0.300      | 0.500 |
| c        | 0.004      | 0.008 | 0.100      | 0.200 |
| D        | 0.110      | 0.118 | 2.800      | 3.000 |
| E        | 0.047      | 0.055 | 1.200      | 1.400 |
| E1       | 0.089      | 0.100 | 2.250      | 2.550 |
| e        | 0.037TYP   |       | 0.950TYP   |       |
| e1       | 0.071      | 0.079 | 1.800      | 2.000 |
| L        | 0.022REF   |       | 0.550REF   |       |
| L1       | 0.012      | 0.020 | 0.300      | 0.500 |
| $\theta$ | 0°         | 8°    | 0°         | 8°    |

## ■SOT-23 Soldering Footprint



### Note:

- All dimensions are in millimeters (mm) unless otherwise specified.  
[所有尺寸均以毫米为单位, 除非另有说明]
- General tolerances:  $\pm 0.10\text{mm}$  unless otherwise specified.  
[通用公差为 $\pm 0.10\text{mm}$ , 除非另有说明]
- Dimensions and tolerances per ASME Y14.5M-2018.  
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
- All dimensions shown are exclusive of burrs and gate residues. Burrs and gate vestiges shall not exceed 0.15 mm in maximum.  
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
- Dimension b does not include dambar protrusion of max 0.100 mm per side.  
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
- Dimensions D and E are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.  
[D和E是塑封体的外部极限尺寸, 不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺, 但是包含了包封错位的最大尺寸]
- Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.  
[成型的管脚应为同一平面, 共面性最大为0.1mm]



## BAT720

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