

5 é / Descriptions

9 5 : .> // x RK Ô Â 8 â 'ož Schottky barrier diodes in a SOT-23 Plastic Package.

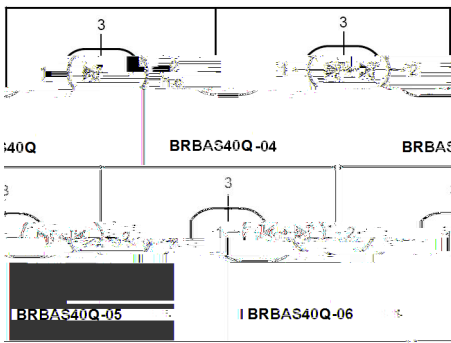
□^a / Features

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Low forward current, Low diode capacitance, small plastic SMD package, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

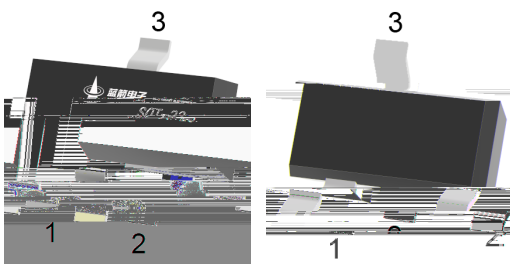
Đ ÷ / Applications

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Ultra high-speed switching, voltage clamping, protection circuits, Meet the stringent requirements of automotive applications.

Ã W] Ô • / Equivalent Circuit



• Ô - æ / Pinning



PIN: See Equivalent Circuit.

, M V / Marking

| Type | BRBAS40Q | BRBAS40Q-04 | BRBAS40Q-05 | BRBAS40Q-06 |
|---------|----------|-------------|-------------|-------------|
| Marking | Q43 | Q44 | Q45 | Q46 |

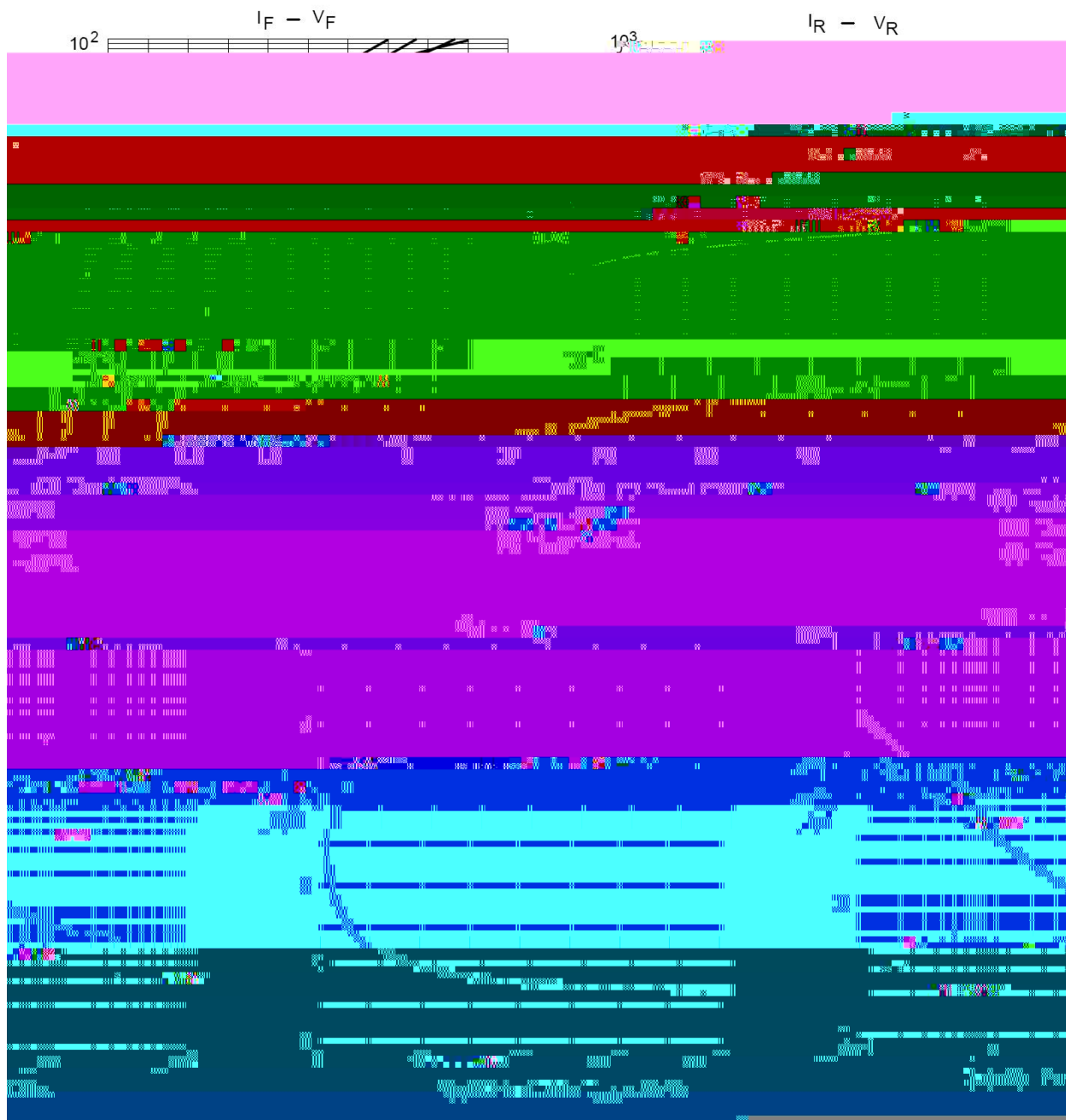
绝对最大额定值 (Ta=25℃ ;)

| Parameter | Symbol | Rating | Unit |
|---|------------------------------|-----------|------|
| Repetitive Reverse Voltage | V_R | 40 | V |
| Average Rectified Forward Current | I_F | 120 | mA |
| Repetitive Peak Forward Surge Current | I_{FRM} $t_p \leq 10\mu s$ | 120 | mA |
| Non-repetitive Peak Forward Surge Current | I_{FSM} $t_p < 10ms$ | 100 | mA |
| Thermal Resistance From Junction to Ambient | R_{JA} | 500 | K/W |
| Junction Temperature | T_j | 150 | |
| Storage Temperature Range | T_{stg} | -55 ~ 150 | |

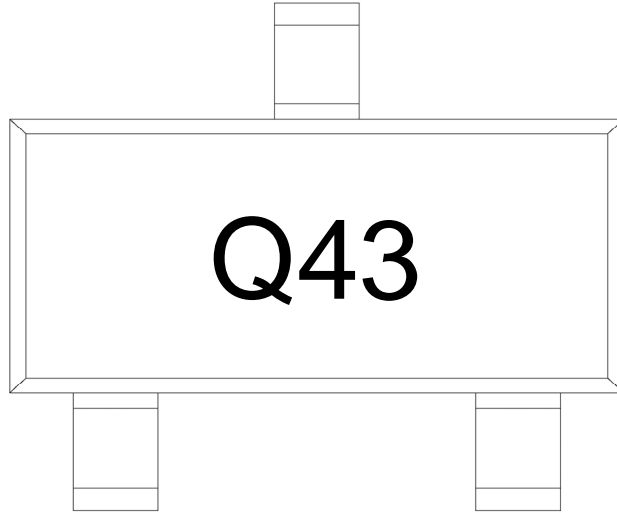
电学特性 (Ta=25℃ ;)

| Parameter | Symbol | Test Conditions | Min | Typ | Max | 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 | A |
| | | $V_R=40V$ | | | 10 | A |
| Diode Capacitance | C_d | $V_R=0$ $f=1MHz$ | | | 5 | pF |

Electrical Characteristic Curve



, M y f / Marking Instructions



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Note:

Q: Automobile halogen-free product Code

43: Product Type

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Note:

- 1. Preheating: 150~200 - , Time: 60~120sec.
- 2. Peak Temp.: 255 r5 - , Duration: 5 r0.5sec.
- 3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ~ »] / Resistance to Soldering Heat Test Conditions

“† y 260 r5 - ž • y 10 r1 sec. Temp.: 260±5 Time: 10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

| Package Type 7>û ~ E | Units ;>û !H | | | | | Dimension ;>û p . (unit Åmm³) | | |
|-------------------------|--------------------|--------------------------|-----------------------|--------------------------------|------------------------|-------------------------------|-------------|-------------|
| | Units/Reel / -- | Reels/Inner Box -- /- | Units/Inner Box /- | Inner Boxes/Outer Box - /1ç | Units/Outer Box /1ç | Reel | Inner Box | Outer Boxç |
| SOT-23 | 3,000 | 10 | 30,000 | 6 | 180,000 | 57x8 | 180x120x180 | 390x385x205 |