

5 é / Descriptions

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

α a / Features

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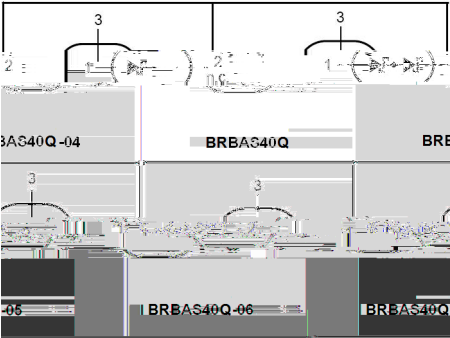
Low forward current, Low diode capacitance, small plastic SMD package, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

Đ ÷ / Applications

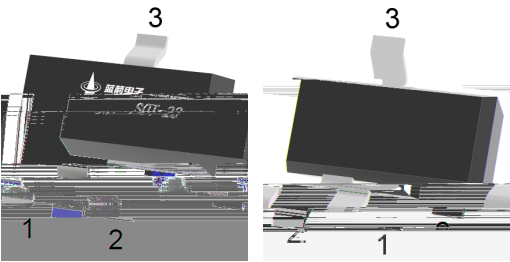
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Ultra high-speed switching, voltage clamping, protection circuits, Meet the stringent requirements of automotive applications.

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

1. Absolute Maximum Ratings(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} $\Delta t_p \leq 1s$	120	mA
Non-repetitive Peak Forward Surge Current	I_{FSM} $\Delta t_p < 10ms$	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	

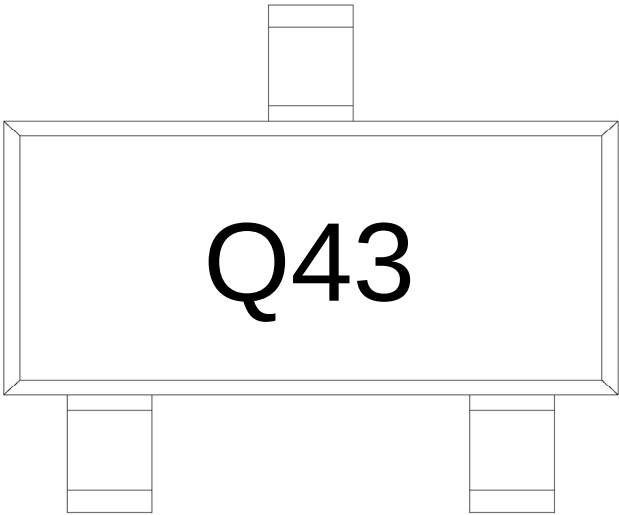
2. Electrical Characteristics(Ta=25℃ ;)

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:

- 10• Ä ½ “† 150 ½200 - k ž • 60 ½120sec; 1.Preheating:150~200 - , Time:60~120sec.
20• Q > “† 255 r5 - k ž • 4 Ò 5 r0.5sec; 2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.
30•D N ò i Ò 0 ,† 2 ½10 - /sec. 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 >û ~ E	Units ;>û !H		Dimension ;>û p . (unit Åmm³)	
	Units/Reel /-	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /1ç
SOT-23	3,000	10	30,000	6