

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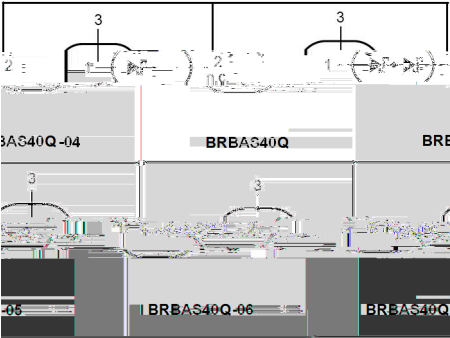
Low forward current, Low diode capacitance, small plastic SMD package, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

Đ ÷ / Applications

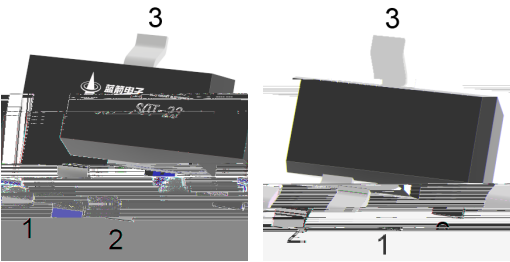
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Ultra high-speed switching, voltage clamping, protection circuits, Meet the stringent requirements of automotive applications.

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

④ ã ? d / Absolute Maximum Ratings(Ta=25 ;)

@ f Parameter	... Z Symbol	f > Rating	% y Unit
Repetitive Reverse Voltage	V _R	40	V
Average Rectified Forward Current	I _F	120	mA
Repetitive Peak Forward Surge Current	I _{FRM} Ä t _p 1s Ä	120	mA
Non-repetitive Peak Forward Surge Current	I _{FSM} Ä t _p <10ms Ä	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	

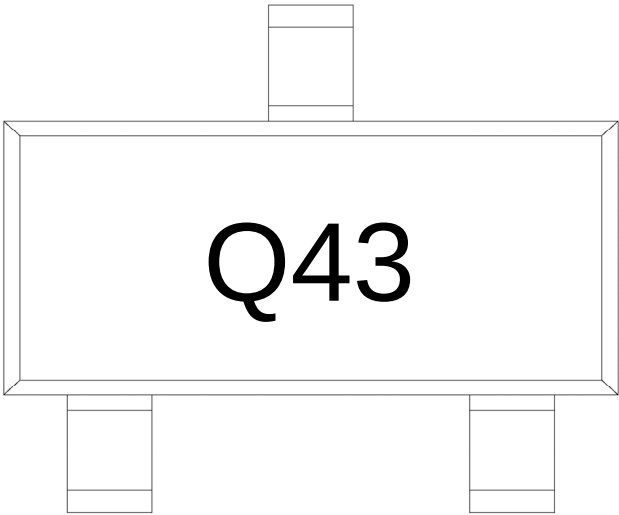
Ô ì × ? d / Electrical Characteristics(Ta=25 ;)

@ f Parameter	... Z Symbol	y i Ú ^ Test Conditions	Â 4 > Min	Á ° > Typ	Â Ý > Max	% y 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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y ° Z W A

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 7>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
				180,000
				57×8
				180×120×180
				390×385×205