

/ Descriptions

Silicon Diode in a SOT-323 Plastic Package.

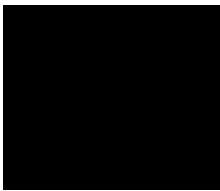
/ Features

Very small plastic SMD package, High switching speed, High Continuous reverse and Repetitive peak reverse voltage, High Repetitive peak forward current, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

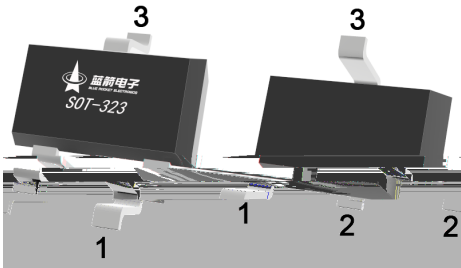
/ Applications

Applications for High-speed switching, surface mounted circuits, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning



PIN: See Equivalent Circuit.

/ Marking

Marking	QA7
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Absolute Maximum Ratings(Ta=25℃ ;)

@ f Parameter	Symbol	f > Rating	% y Unit
Repetitive Reverse Voltage	V _{RRM}	85	V
Continuous reverse voltage	V _R	75	V
Continuous forward current	I _{F(1)}	150	mA
	I _{F(2)}	130	mA
Repetitive peak forward current	I _{FRM}	500	mA
Non-repetitive Peak Forward Current	I _{FSM(1)(t=1 S)}	0.5	A
	I _{FSM(2)(t=1 mS)}	1.0	A
	I _{FSM(3)(t=1 S)}	4.0	A
Power Dissipation	P _D	200	mW
Junction Temperature	T _j	150	
Storage Temperature Range	T _{stg}	-55 ~ +150	

Electrical Characteristics(Ta=25℃ ;)

@ f Parameter	Symbol	Test Conditions	Min	Typ	Max	% y Unit
Forward Voltage	V _F	I _F =1mA			715	mV
		I _F =10mA			855	mV
		I _F =50mA			1	V
		I _F =150mA			1.25	V
Instantaneous Reverse Current Total Capacitance	I _R	V _R =25V			30	nA
		V _R =75V			1	A
		V _R =25V T _j =150			30	A
		V _R =75V T _j =150			50	A
Diode capacitance	C _d	V _R =0 f=1MHz			1.5	pF
Reverse Recovery Time	t _{rr}	I _R =1mA R _L =100 I _F =1R=10mA			4	ns
Forward recovery voltage	V _{fr}	I _F =10mA t _r =20ns			1.75	V

Ô ? d • Ž ¢ / Electrical Characteristic Curve

Ø □ =) ¢ / Package Dimensions

, M y f / Marking Instructions

QA7

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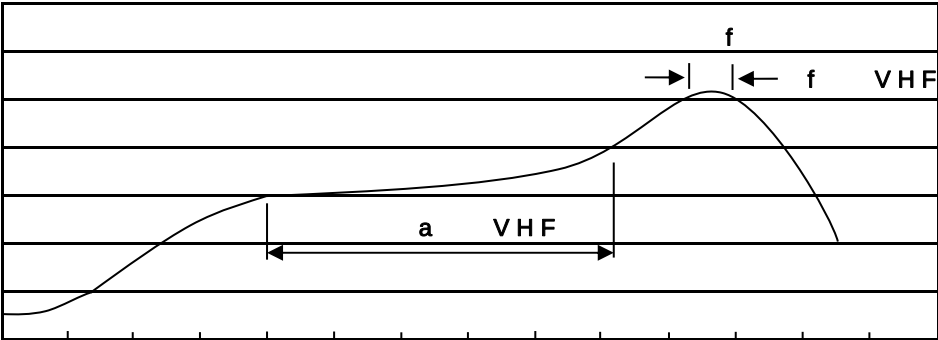
Note:

Q: Automobile halogen-free product Code

A7: Product Type Code

šWD t...•Žč (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6

7HPSHUDWXUH



7LPH VHF

ačy

Note:

- 1o•Ä½“† 150½200 - kž• 60½120sec;
- 2o•Q>“† 255 r5 - kž•4 Ò 5 r0.5sec;
- 3o•D Nò i Ò 0 ,† 2½10 - /sec.
- 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-323	3,000	10	30,000	6	180,000	7 T×8	180×120×180	390×385×205

„Đ y f / Notices