

Rev.A May.-2023

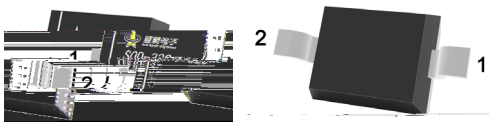
SOD-323

Schottky Diode in a SOD-323 Plastic Package.

AEC-Q101

Low positive pressure drop, can ignore the reverse recovery time, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

Schottky diode, Meet the stringent requirements of automotive applications.



PIN1:Cathode

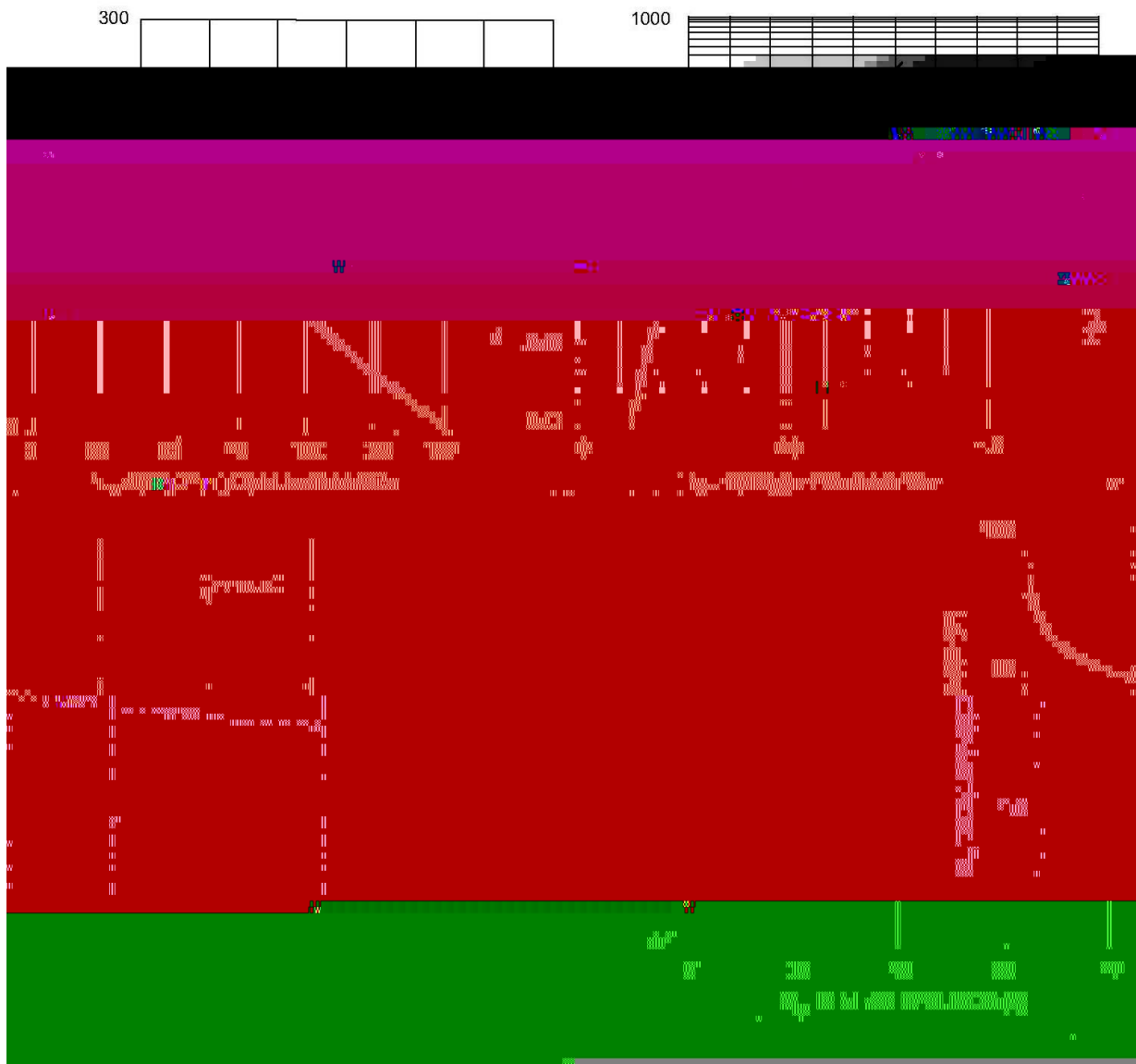
PIN2:Anode

Model	BRSD103AWSQ	BRSD103BWSQ	BRSD103CWSQ
Marking	QS4	QS5	QS6

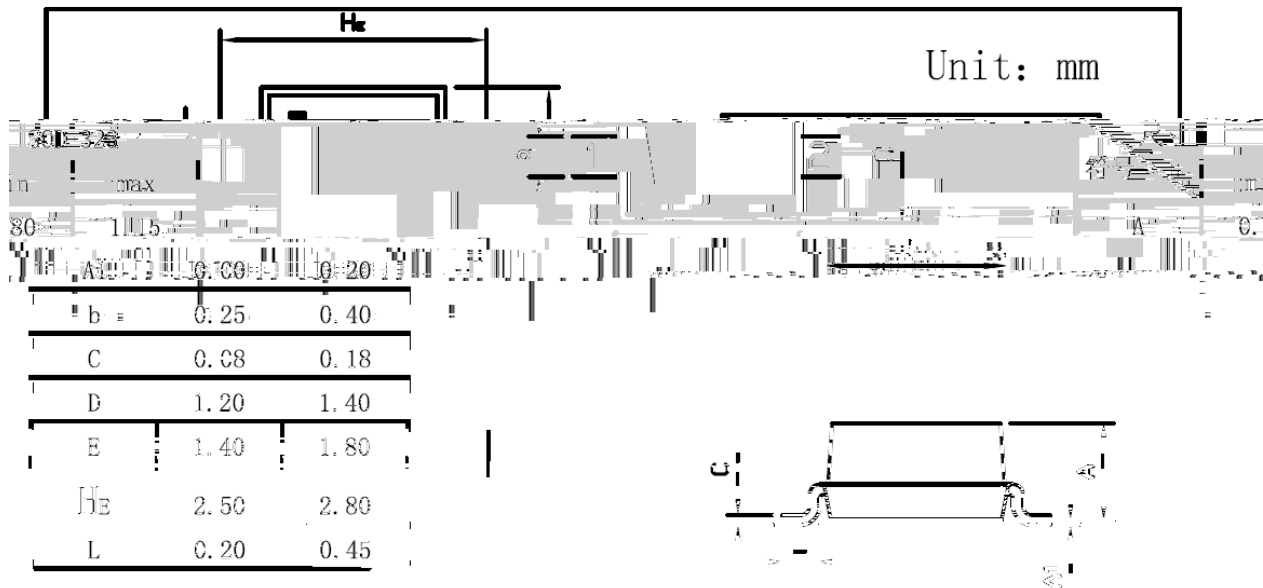
Parameter	Symbol	Rating			Unit
		BRSD103AWSQ	BRSD103BWSQ	BRSD103CWSQ	
Peak Repetitive Reverse Voltage , Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	40	30	20	V
RMS Reverse Voltage	$V_{R_{RMS}}$	28	21	14	V
Non-Repetitive Peak Forward Current	I_{FM}	350			mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	1.5			A
Power Dissipation	P_D	200			mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625			/W
Junction and Storage Temperature Range	T_J, T_{stg}	-65 125			

Parameter		Symbol	Test Conditions	Rating			Unit
				Min	Typ	Max	
Reverse Breakdown Voltage		$V_{(BR)}$	$I_R=10\mu A$	V_R			V
Forward Voltage Drop		V_{FM}	$I_F=20mA$			0.37	V
			$I_F=200mA$			0.6	
Instantaneous Reverse Current	BRSD103AWSQ	I_{RM}	$V_R=30V$			5.0	μA
	BRSD103BWSQ		$V_R=20V$				
	BRSD103CWSQ		$V_R=10V$				
Reverse Recovery Time		t_{rr}	$I_F=I_R=200mA$ $I_{rr}=0.1 \times I_R$ $R_L=100\Omega$		10		ns
Total Capacitance		C_T	$V_R=0V$ $f=1.0MHz$		50		pF

Rev.A May.-2023



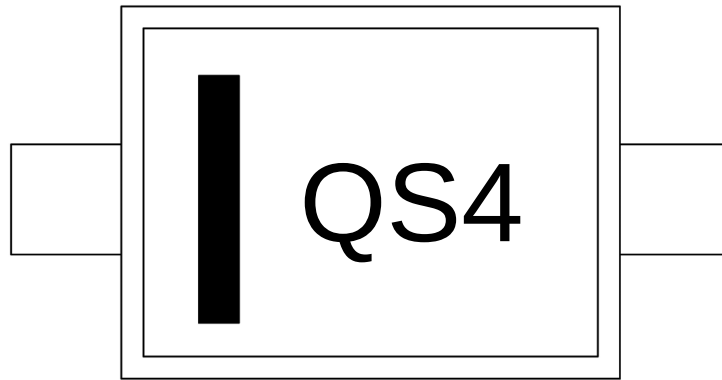
Rev.A May.-2023



PIN: 1.CA 2.AN

3

S 0-32



Q

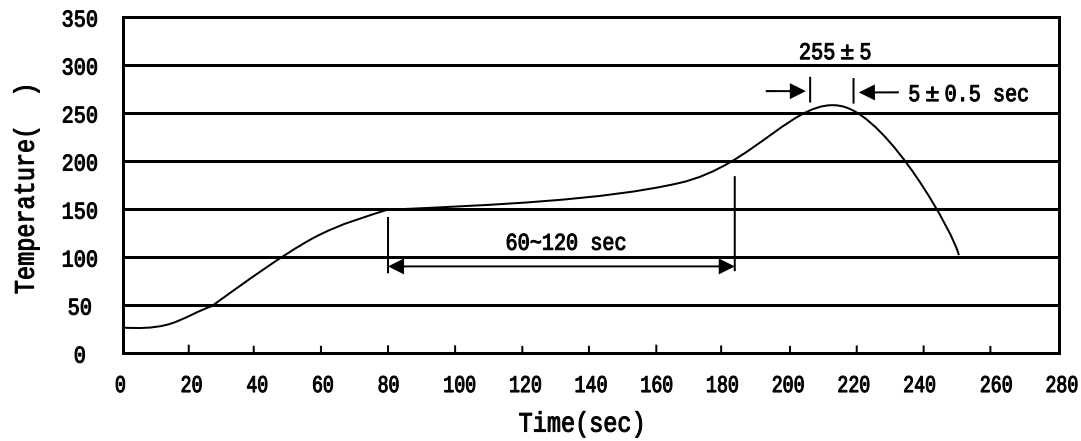
S4

Note:

Q: Automobile halogen-free product Code

S4: Product Type

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1 150 200 60 120sec; 1.Preheating:150~200 , Time:60~120sec.
- 2 255±5 5±0.5sec; 2.Peak Temp.:255±5 , Duration:5±0.5sec.
- 3 2 10 /sec. 3. Cooling Speed: 2~10 /sec.

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm ³)		
SOD-323	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205