

Rev.A Jun.-2022

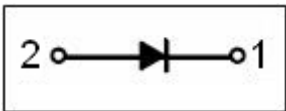




SOD-323
Silicon Diode in a SOD-323 Plastic Package.

AEC-Q101
Fast switching diodes, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

Small signal diode, Meet the stringent requirements of automotive applications.



PIN1:Cathode PIN2:Anode

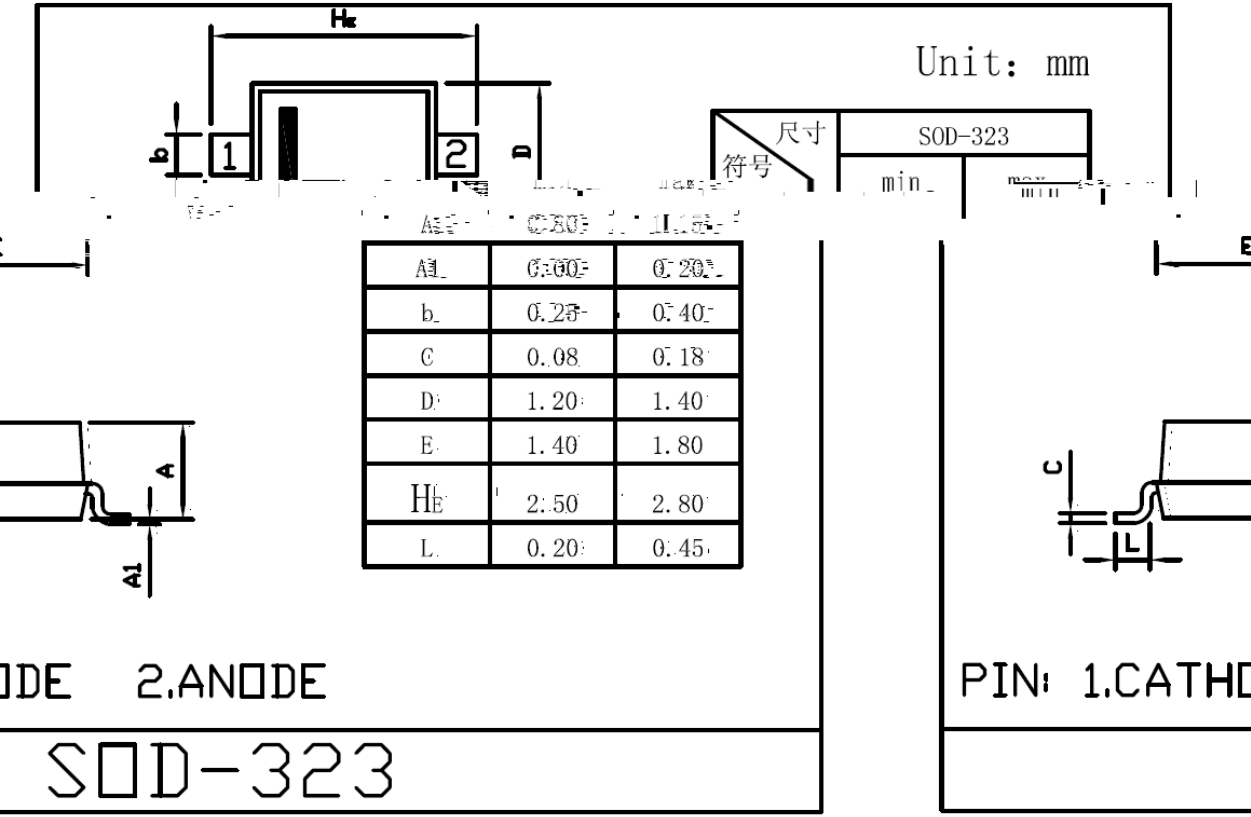
Marking	QA2
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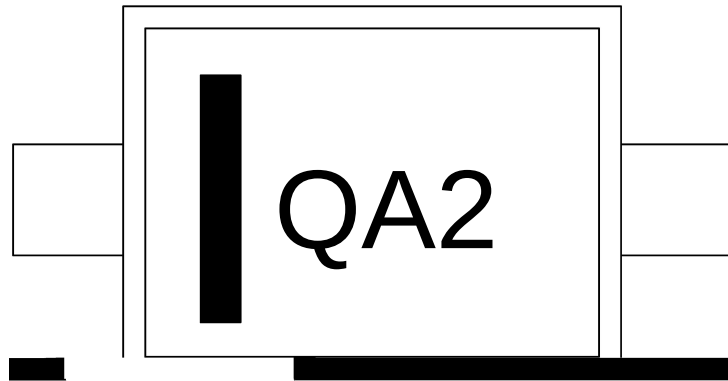


Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Average Rectified Output Current	I_O	150	mA
Forward Continuous Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM} (t=1.0\mu s)$	2.0	A
	$I_{FSM} (t=1.0s)$	1.0	A
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	625	°C/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=10mA$			1.0	V
Instantaneous Reverse Current	I_R	$V_R=20V$			25	nA
		$V_R=75V$			5	μA
		$V_R=20V \quad T_j=150^\circ C$			50	μA
Capacitance	C_{tot}	$V_F=V_R=0V$			4	pF
Reverse Recovery Time	t_{rr}	$I_F=10mA$ $I_R=1mA$ $V_R=6.0V$ $R_L=100\Omega$			4	ns
Voltage Rise when Switching On tested	V_{fr}	$t_p=0.1\mu s$ Time<30ns fp=5to100kHz			2.5	V

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Q

A2

Note:

Q: Automobile halogen-free product Code

A2: Product Type



Temperature Profile for IR Reflow Soldering(Pb-Free)

- 说明：
- Note:
- 1、预热温度 150 ~ 200℃，时间 60 ~ 120sec;

1.Preheating:150~200℃, Time:60~120sec.
- 2、峰值温度 255±5℃，时间持续为 5±0.5sec;

2.Peak Temp.:255±5℃, Duration:5±0.5sec.
- 3、焊接制程冷却速度为 2 ~ 10℃/sec.

3. Cooling Speed: 2~10℃/sec.

温度：260±5℃

时间：10±1 sec.

Temp.:260±5℃

Time:10±1 sec

卷盘包装 / REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box	Outer Box