

/ Revised record

H	2018-4				
A	2022-7-13	all	BR/Q AEC-Q101 , H Q 245±5°C 5±0.5sec 255±5°C 0.5sec 5±		

/ Descriptions

SOD-323

Schottky Diode in a SOD-323 Plastic Package.

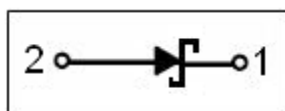
/ Features

AEC-Q101

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

/ Applications

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

/ Equivalent Circuit**/ Pinning**

PIN1:Cathode

PIN2:Anode

/ Marking

Marking	Q86
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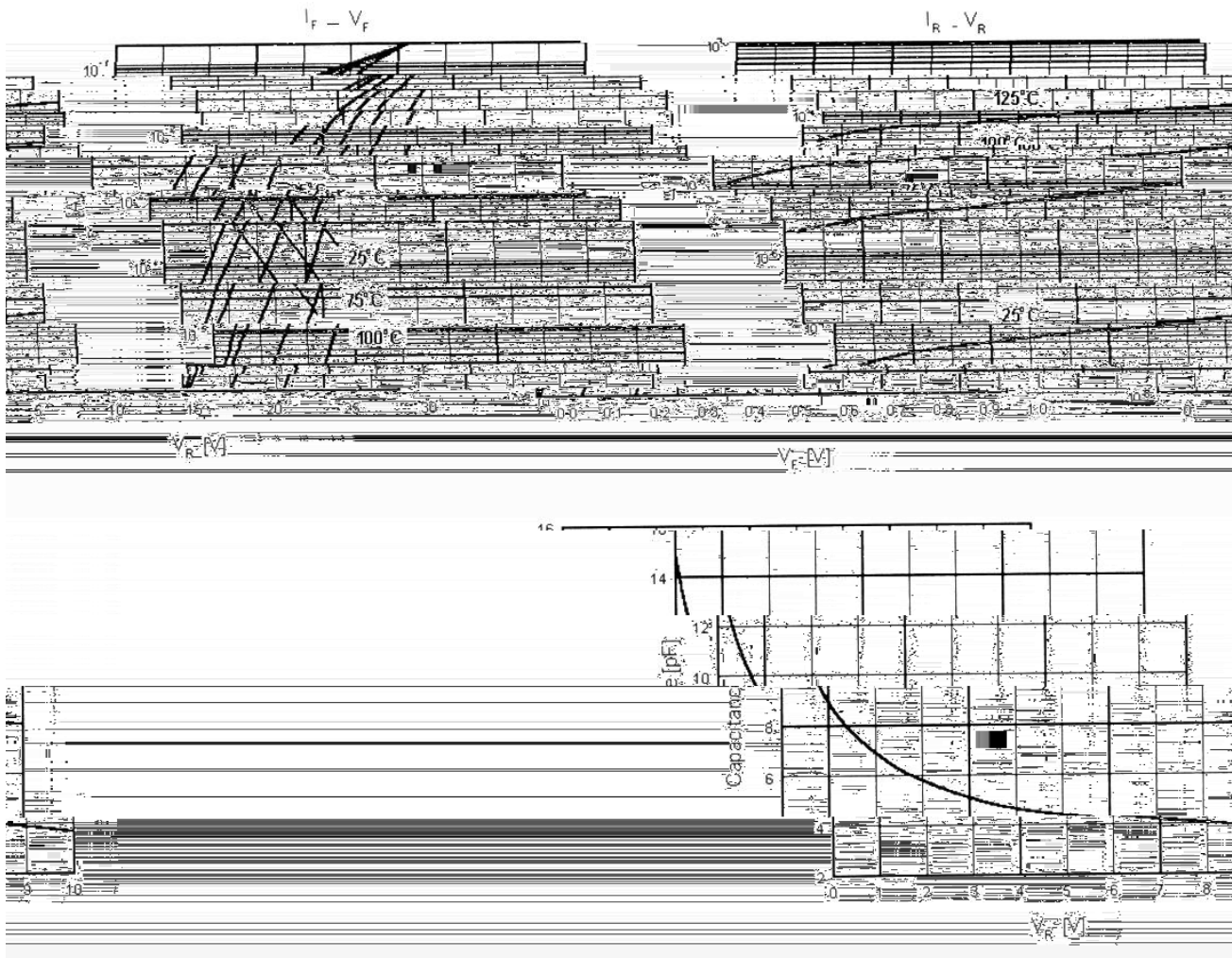
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	30	V
Continuous forward current	I_F	200	mA
Surge non repetitive forward current	I_{FSM}	600	mA
Power Dissipation	P_D	250	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	430	$^{\circ}\text{C}/\text{W}$
Junction Temperature Range	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55~150	$^{\circ}\text{C}$

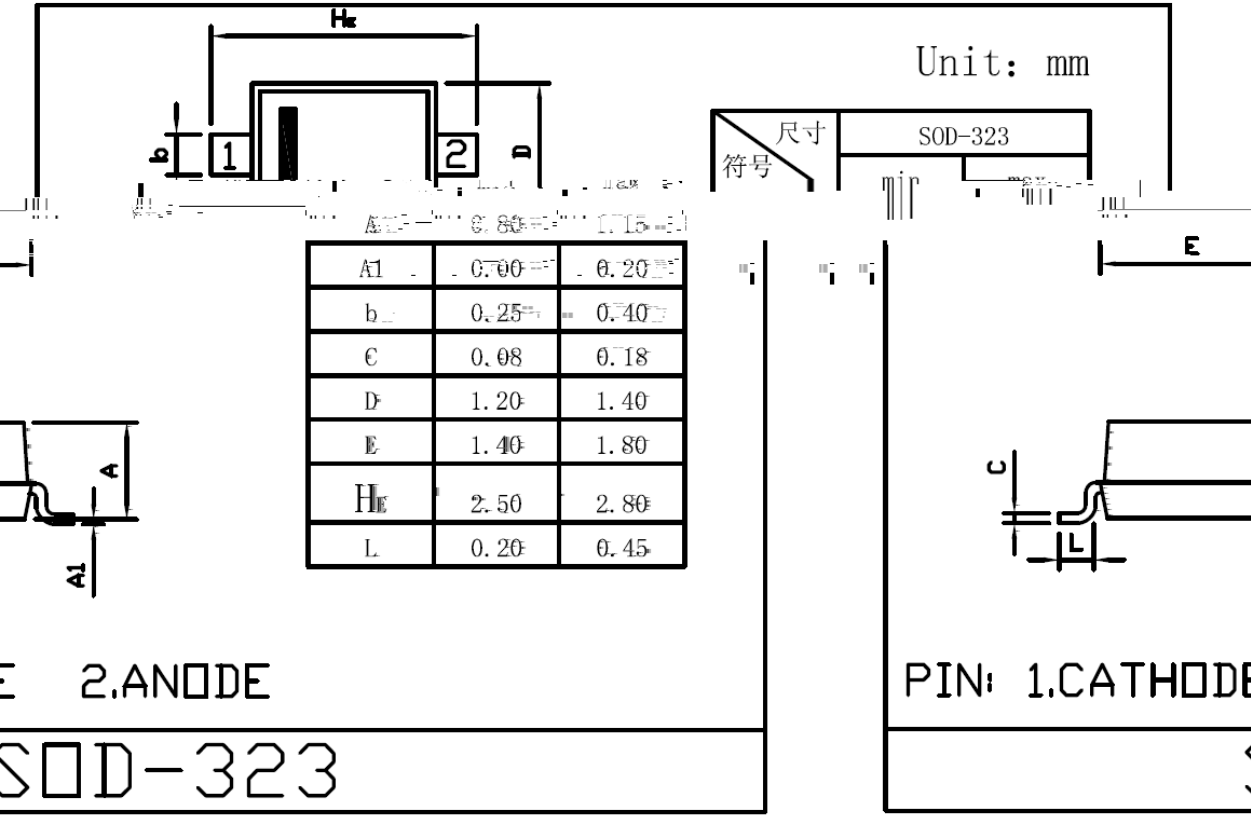
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating		Unit
			MIN	MAX	
Reverse Voltage	V_R	$I_R=10\mu\text{A}$	30		V
Peak Forward voltage	V_F	$I_F=0.1\text{mA}$		240	mV
		$I_F=1.0\text{mA}$		320	mV
		$I_F=10\text{mA}$		400	mV
		$I_F=30\text{mA}$		500	mV
		$I_F=100\text{mA}$		0.8	V
Instantaneous Reverse Current	I_R	$V_R=25\text{V}$		2.0	μA
Total capacitance	C_T	$V_R=1.0\text{V}$ $f=1.0\text{MHz}$		10	pF
Reverse recovery time	t_{rr}	$I_{RR}=1.0\text{mA}$ $R_L=100\Omega$ $I_F=10\text{mA}$		5.0	ns

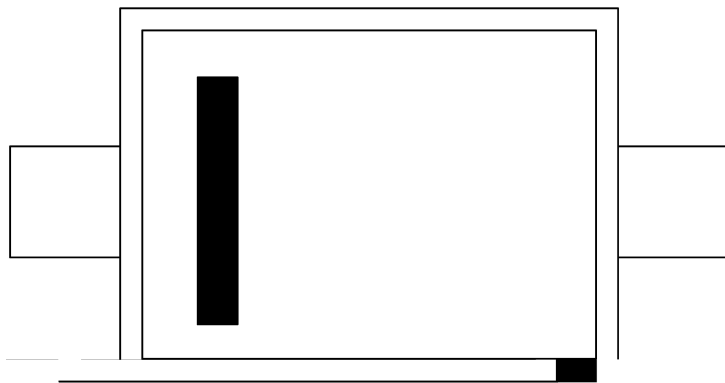
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



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() / **Temperature Profile for IR Reflow Soldering(Pb-Free)**

Note:

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

/ **Resistance to Soldering Heat Test Conditions**

260±5°C	10±1 sec.	Temp.:260±5°C	Time:10±1 sec
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/ **Packaging SPEC.**

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (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 盒	Outer Box 箱