

Features:

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

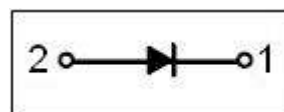
Descriptions :

Silicon Diode in a SOD-323 Plastic Package.

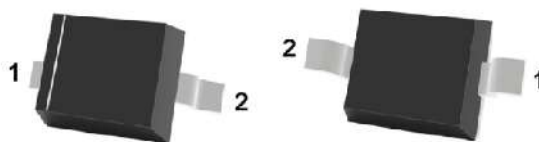
Applications:

Switching diodes, Meet the stringent
requirements of automotive application

Equivalent Circuit



Pinning



PIN1: Cathode

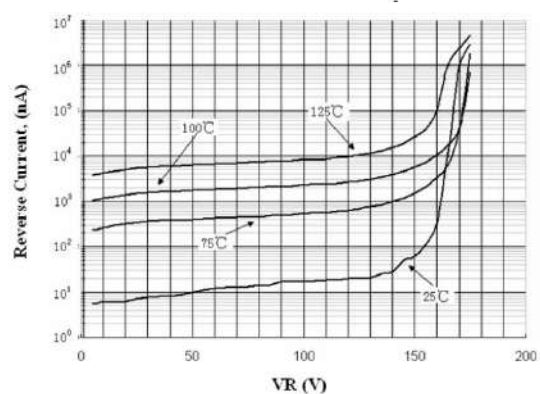
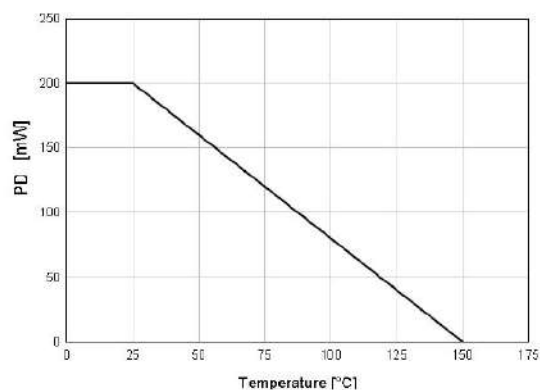
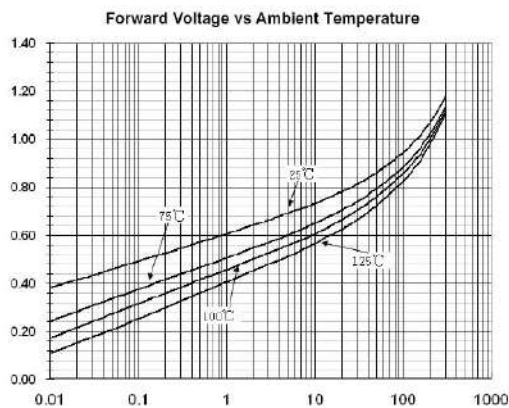
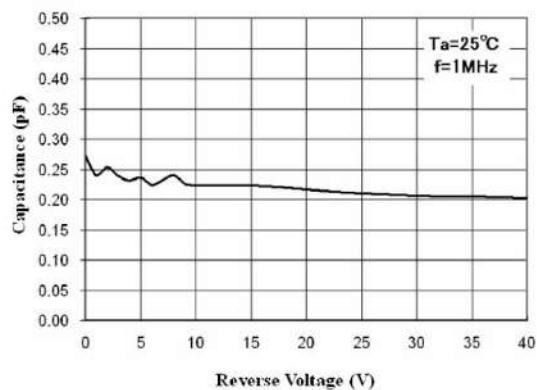
PIN2: Anode

Absolute Maximum Ratings(Ta=25°C)

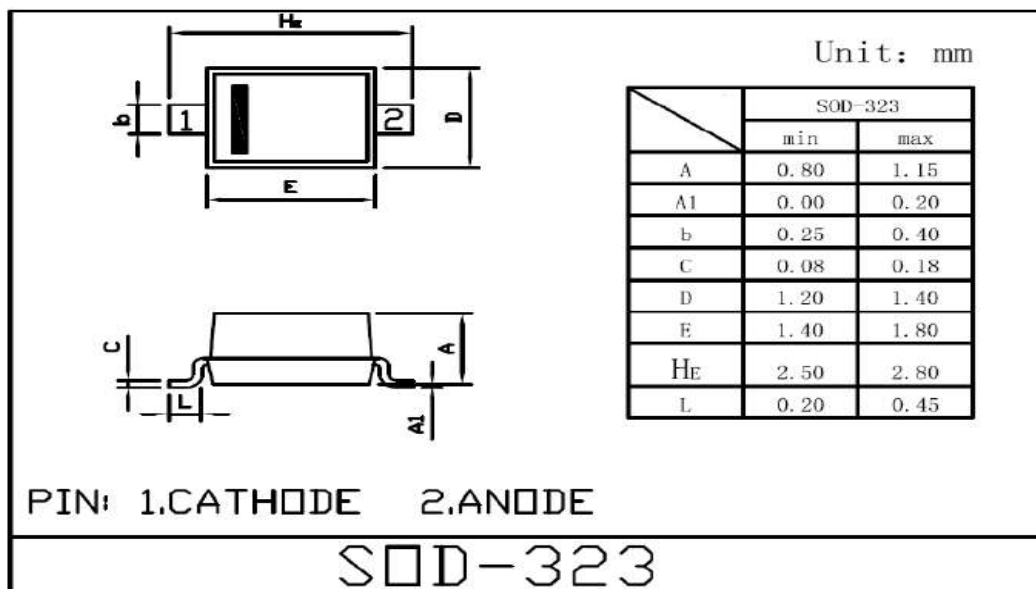
Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	80	V
Peak Reverse Voltage	V_{RM}	90	V
Average Rectified Output Current	I_O	150	mA
Forward Continuous Current	I_{FM}	250	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM} (t=1.0\mu s)$	2.0	A
Power Dissipation	P_D	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-65~150	°C

Electrical Characteristics(Ta=25°C)

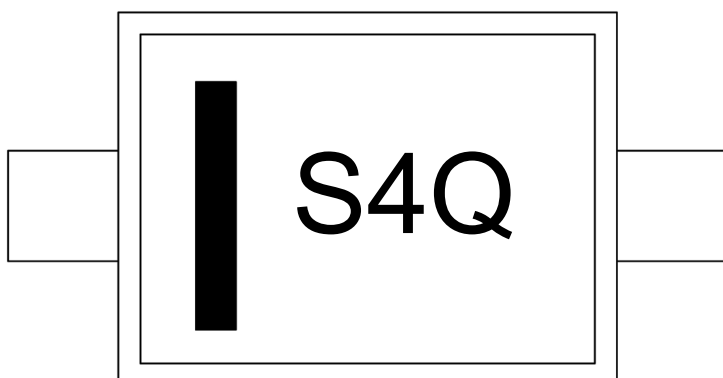
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=100mA$			1.2	V
Reverse Leakage Current	I_R	$V_R=80V$			100	nA
Breakdown Voltage	V_{BR}	$I_R=100\mu A$	80		V	
Reverse Recovery Time	t_{rr}	$I_F=10mA$ $V_R=6.0V$ $R_L=100\Omega$			4.0	ns
Total Capacitance	C_T	$V_R=0.5V$ $f=1.0MHz$			4.0	pF



Package Dimensions



Marking Instructions

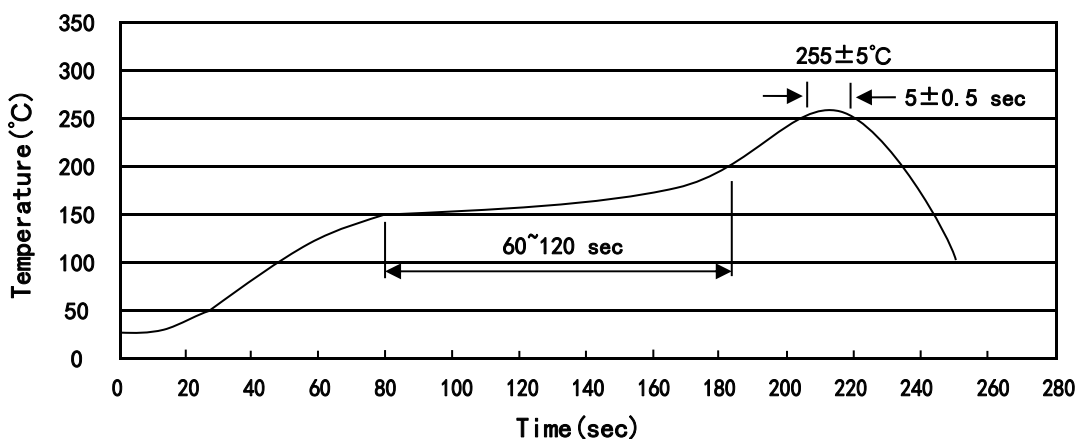


Note:

S4: Product Type Code

Q: Automobile halogen-free product Code

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1. Preheating: 150~200°C, Time: 60~120 sec.

2. Peak Temp.: 255±5°C, Duration: 5±0.5 sec.

3. Cooling Speed: 2~10°C/sec.

Resistance to Soldering Heat Test Conditions:

Temp.: 260±5°C

Time: 10±1 sec

Packaging SPEC.

Package Type	Units					Dimension (unit : mm3)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-323	3,000	10	30,000	6	180,000	7" × 8	180×120×180	390×385×205