

Rev.A Oct.-2025

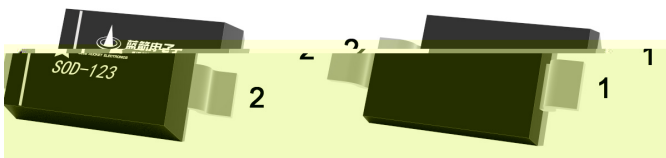
SOD-123

Schottky Diode in a SOD-123 Plastic Package.

AEC-Q101

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

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



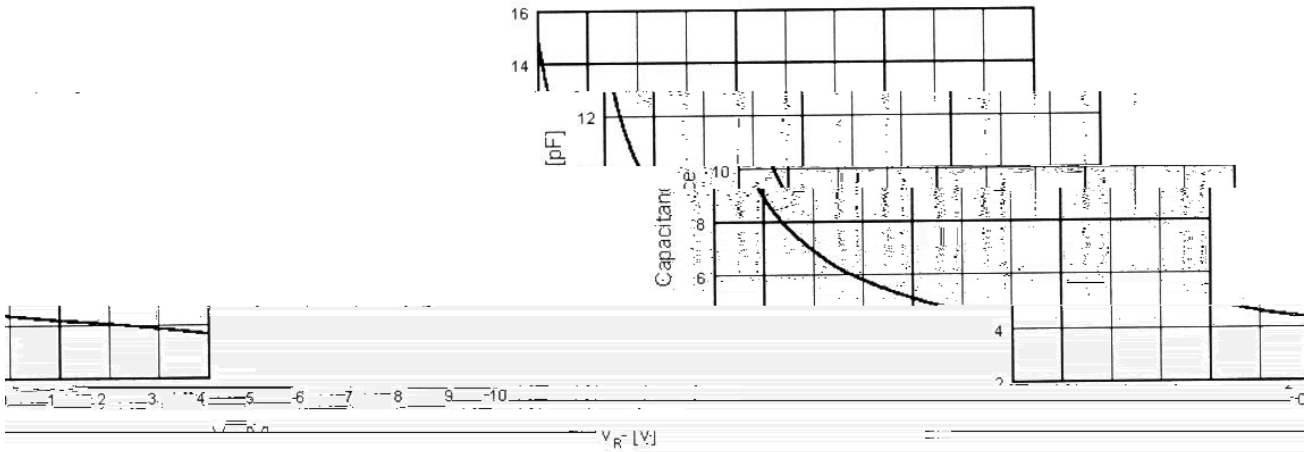
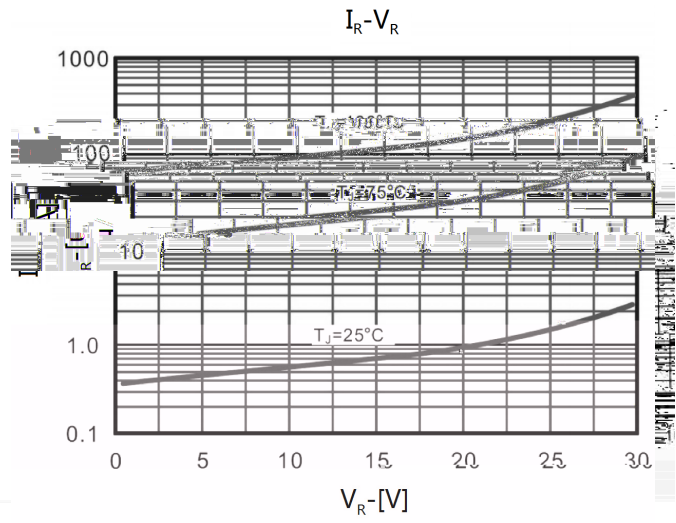
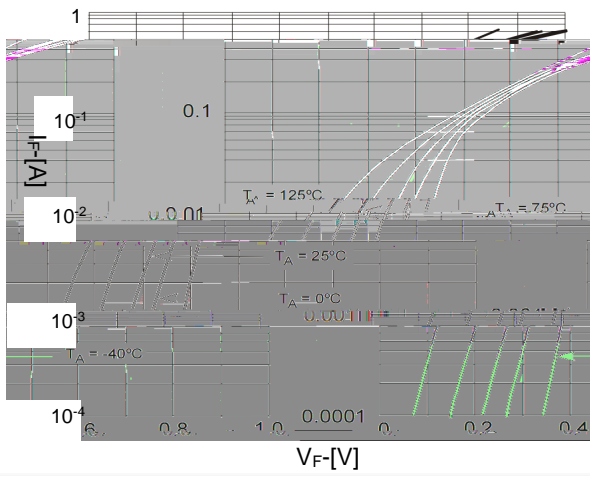
PIN1:Cathode

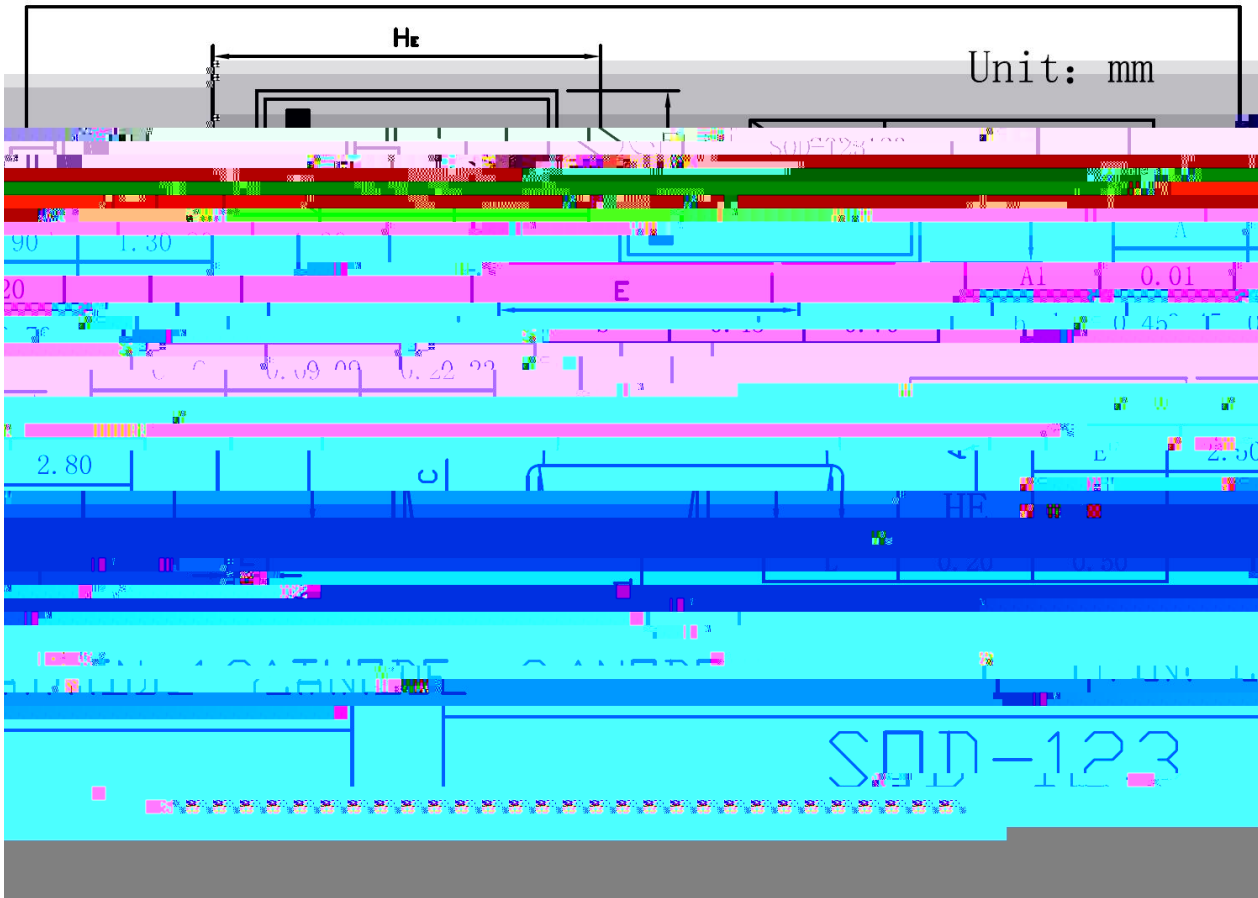
PIN2:Anode

Marking	QL4
---------	-----

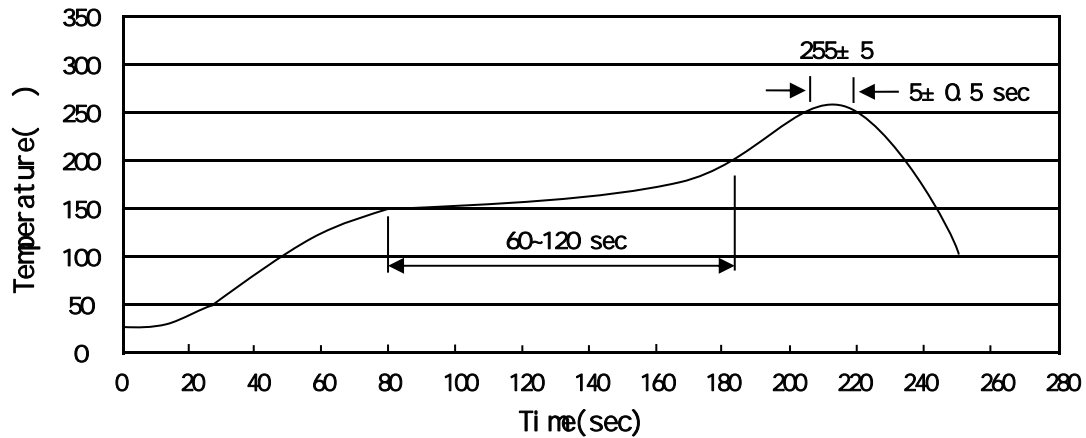
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	30	V
Continuous forward current	I_F	200	mA
Surge non repetitive forward current	I_{FSM}	600	mA
Power Dissipation	P_D	250	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	430	/W
Junction Temperature Range	T_J	125	
Storage Temperature Range	T_{stg}	-55 150	

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







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)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-123	3,000	10	30,000	6	180,000	7 x8	180x120x180	390x385x205