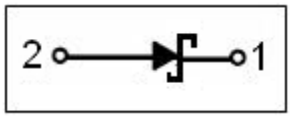
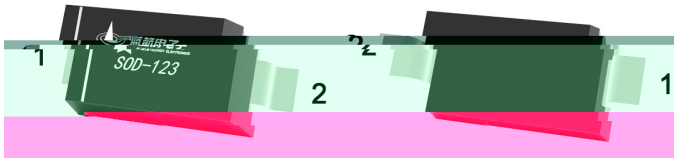
SOD-123

Schottky Diode in a SOD-123 Plastic Package.

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

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



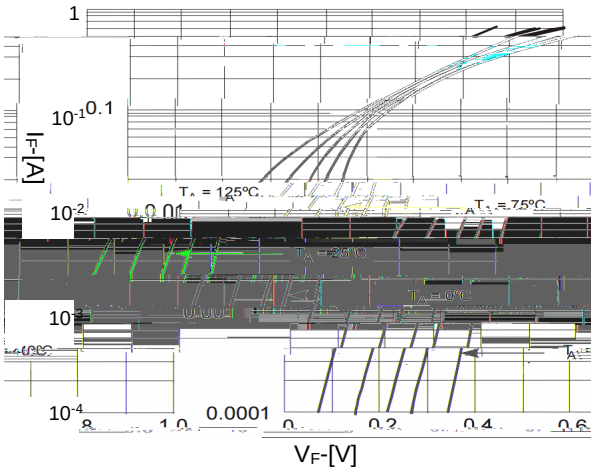


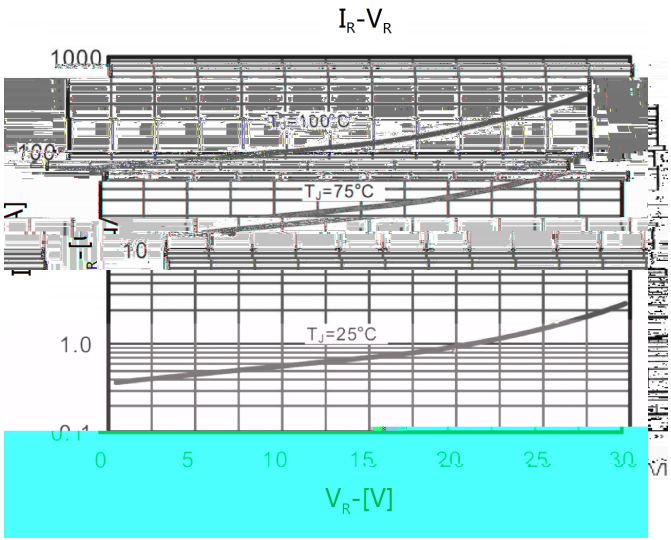
PIN1:Cathode PIN2:Anode

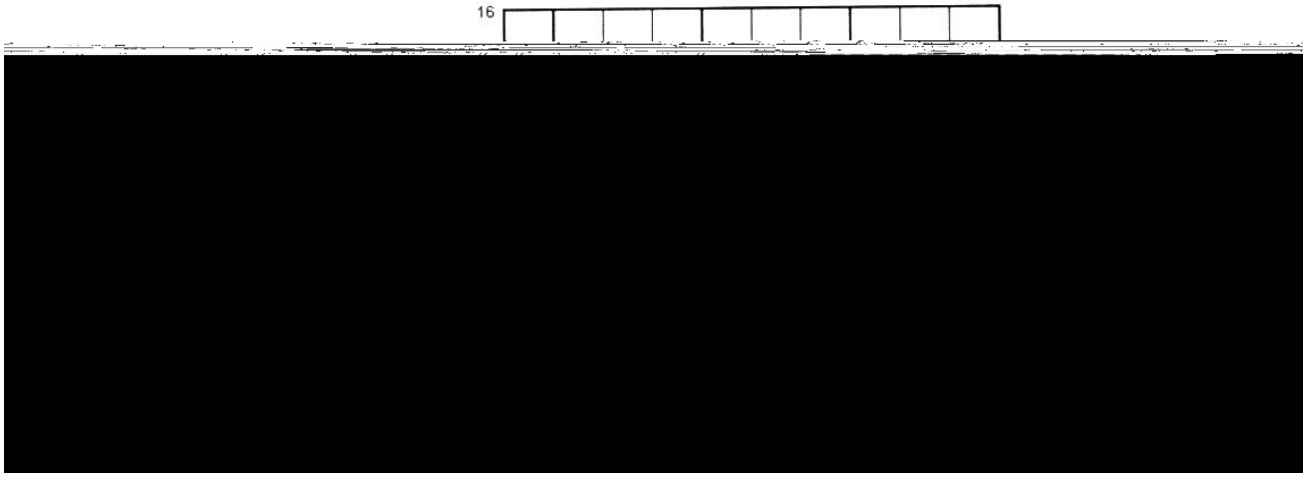
Marking	QL4

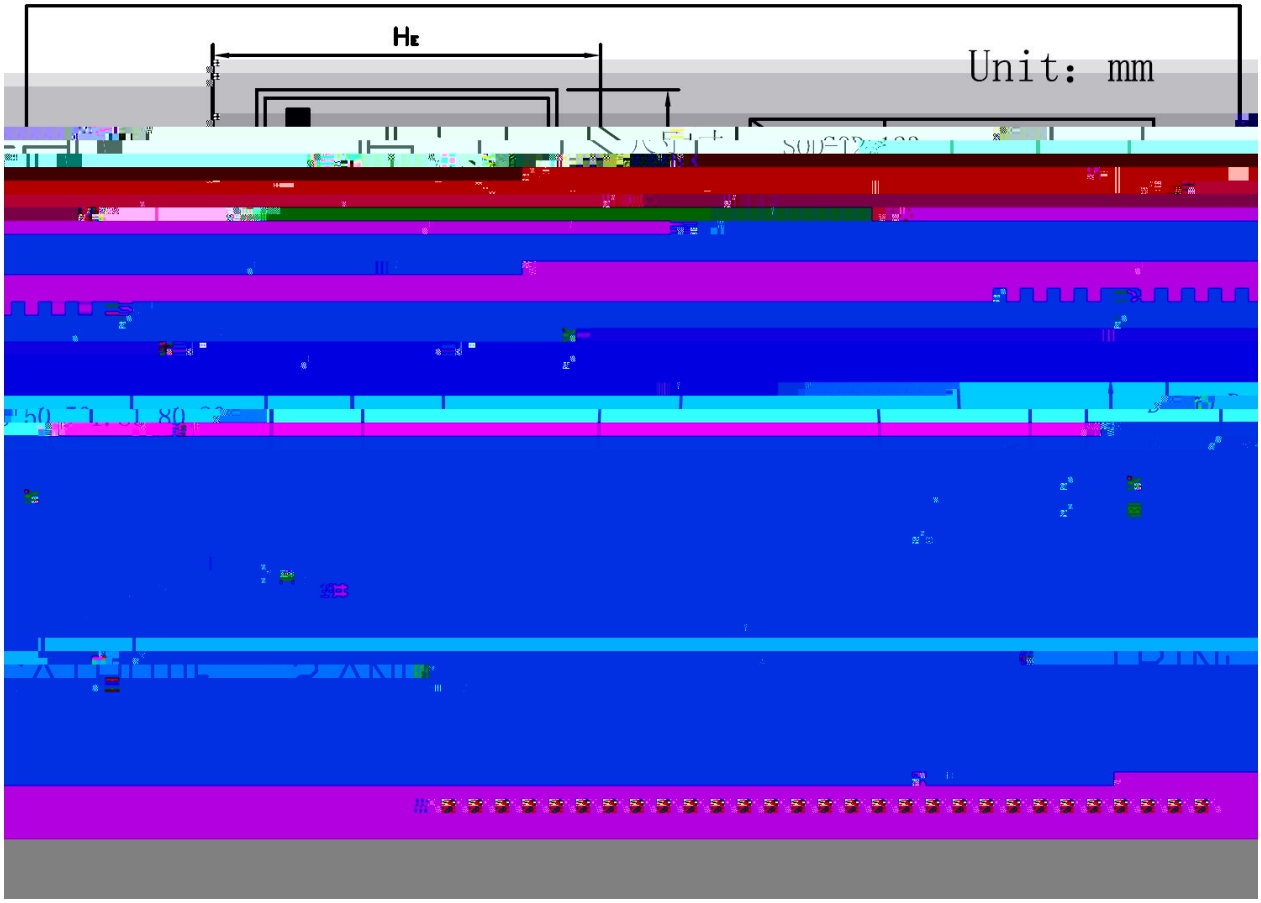
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	30	V
Continuous forward current	I_F	200	mA
Surge non repetitive forward current	I_{FSM}	600	mA
Power Dissipation	P_D	250	mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	430	/W
Junction Temperature Range	T_J	125	
Storage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

Parameter	Symbol	Test Conditions	Rating		Unit
			MIN	MAX	
Reverse Voltage	V_R	I_R=10μA	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=100Ω I_F=1$_R$=10mA		5.0	ns

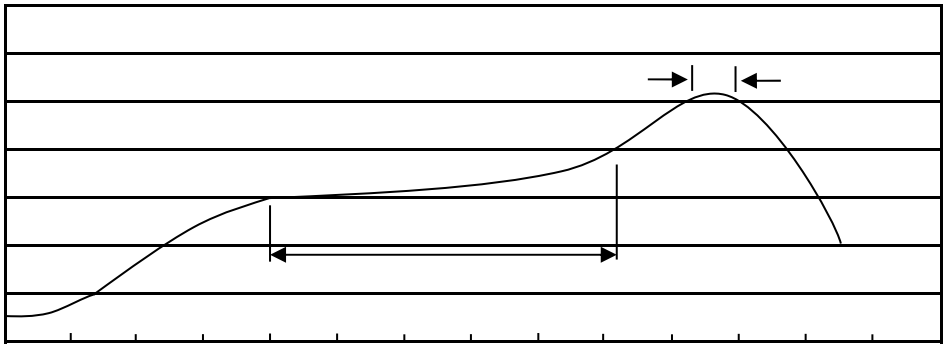

1
10-1
0.1
IF-[A]
10-2
0.01
TA = 125°C
TA = 75°C
TA = 25°C
10-3
0.001
TA = 0°C
10-4
0.0001
0
0.2
0.4
0.6
VF-[V]


IR-VR
1000
100
TJ=100°C
TJ=75°C
10
IR-[μA]
1.0
TJ=25°C
0.1
0
5
10
15
20
25
30
VR-[V]


16


Unit: mm

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 mm³)
	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 ×8	180×120×180	390×385×205