

/ Revised record

H	2018-4				
A	2022-5-24	all	BR Q AEC-Q101 , H Q 245 ±5°C 5±0.5sec 255±5°C 5±0.5sec		

/ Descriptions

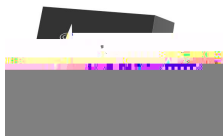
SOD-323

Silicon Diode in a SOD-323 Plastic Package.

AEC-Q101

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

Switching diodes, Meet the stringent requirements of automotive applications.



PIN1:Cathode

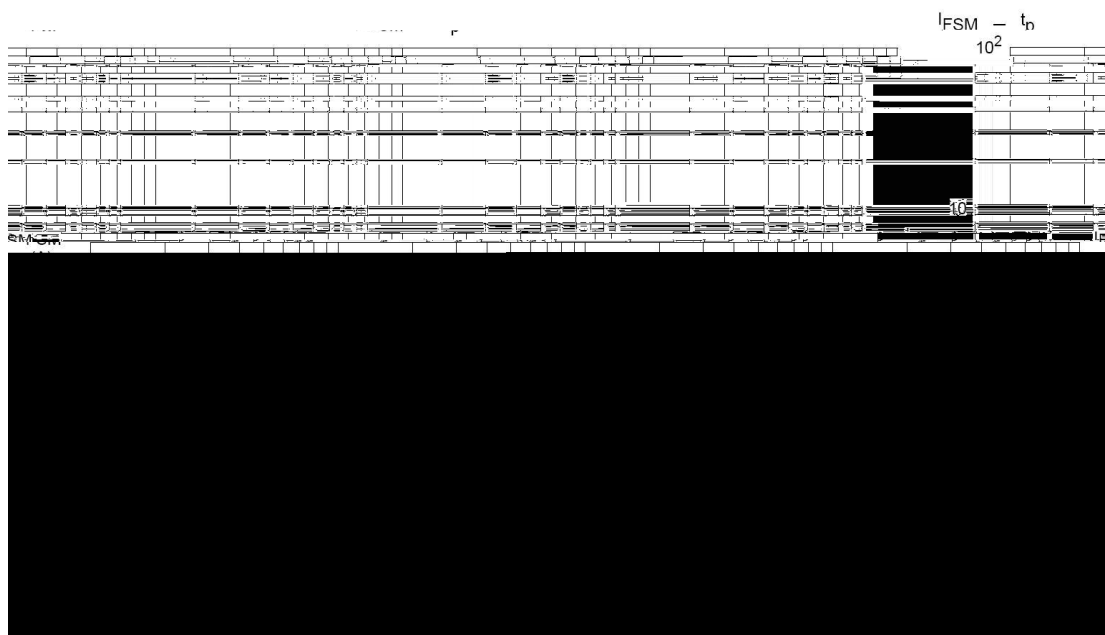
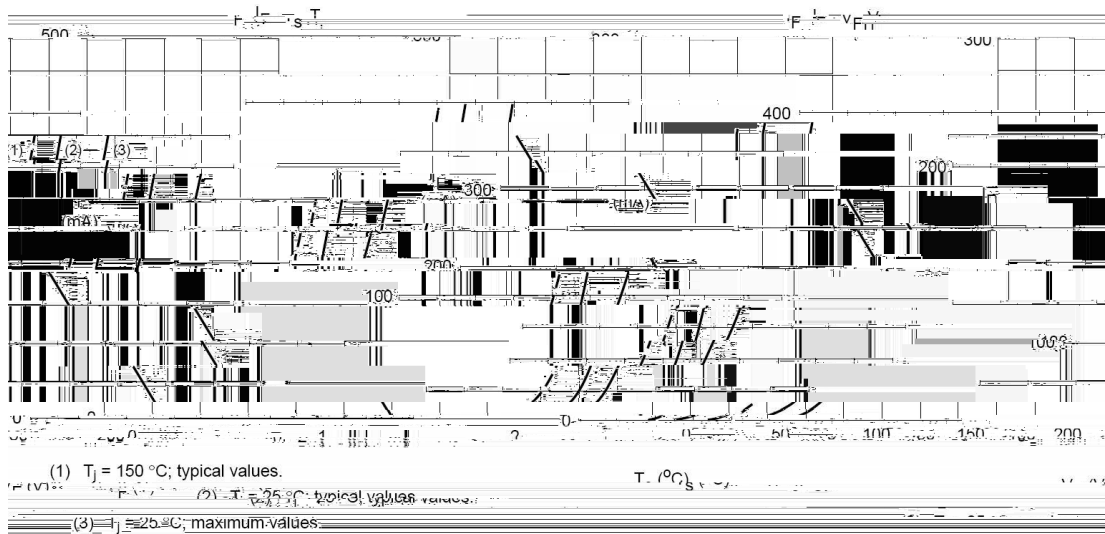
PIN2:Anode

/ Marking

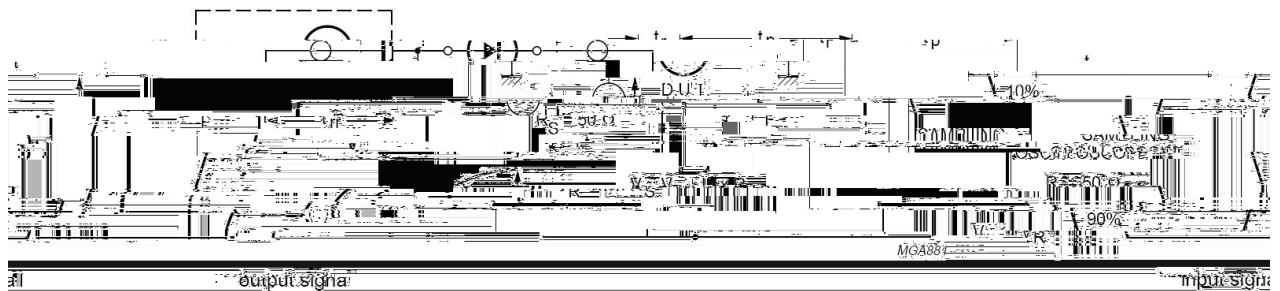
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	85	V
Continuous forward current	$I_{F(AV)}$ ($T_s=90^{\circ}C$)	250	mA
Non-repetitive peak forward current	$I_{FSM(1)(t=1S)}$	0.5	A
	$I_{FSM(2)(t=1mS)}$	1.0	A
Total power dissipation	P_{tot} ($T_s=90^{\circ}C$)	400	mW
Thermal resistance from junction to soldering point	$R_{\theta J-S}$	150	K/W
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-65~150	$^{\circ}C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=1mA$			715	mV
		$I_F=10mA$			855	mV
		$I_F=50mA$			1.0	V
		$I_F=150mA$			1.25	V

/ Electrical Characteristic Curve

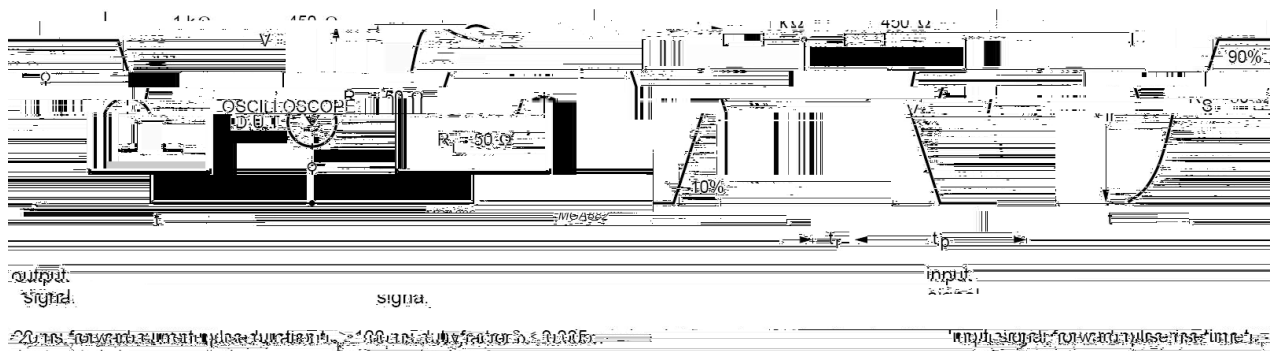


/ Test circuit and waveforms.



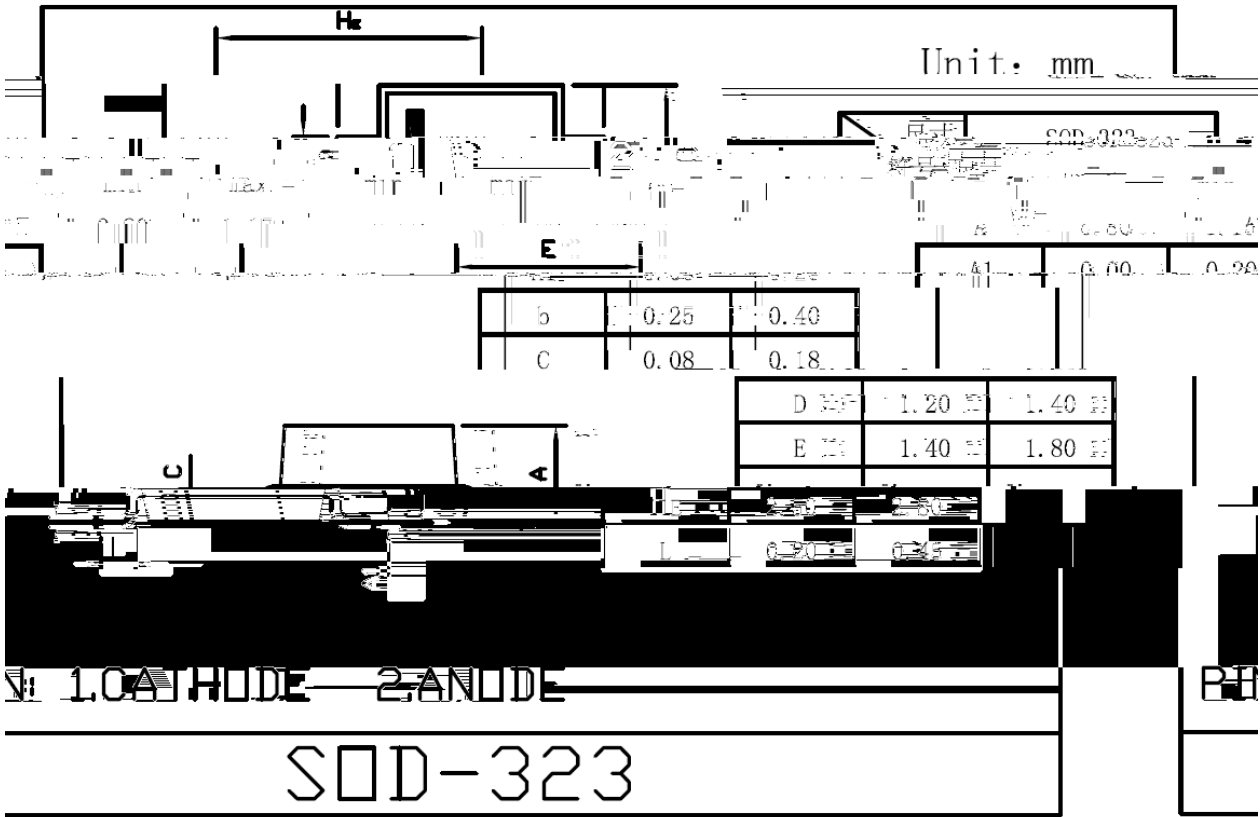
(1) $I_R = 1 \text{ mA}$.

factor $\delta = 0.05$. Input signal: reverse pulse rise time $t_r = 0.6 \text{ ns}$, reverse voltage pulse duration $t_s = 100 \text{ ns}$, duty factor $D = 0.05$.

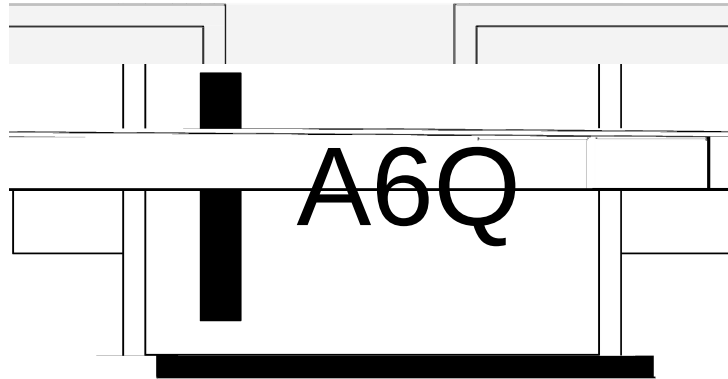




/ Package Dimensions



/ Marking Instructions



A6

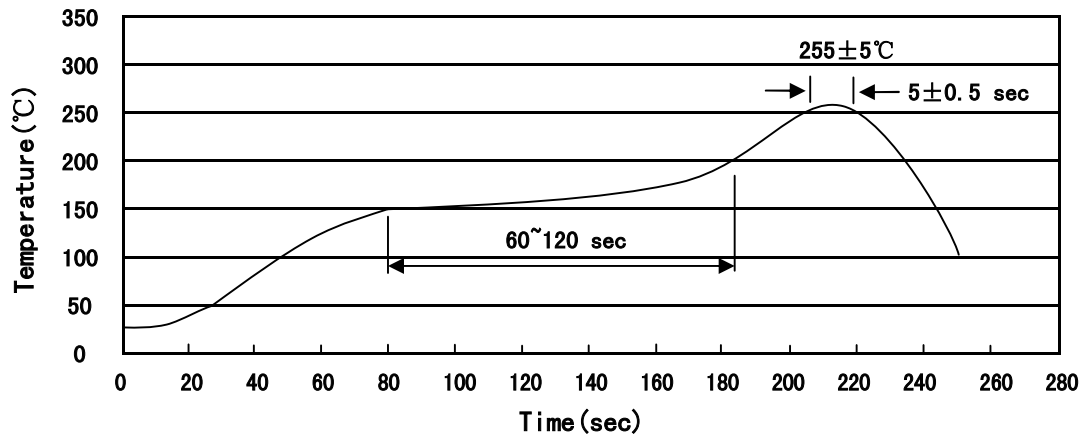
Q

Note:

A6: Product Type Code

Q: Automobile halogen-free product Code

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



Note:

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

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.: 260±5 Time: 10±1 sec

/ Packaging SPEC.

/ 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-323	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205

/ Notices