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

SOD-323

Silicon Diode in a SOD-323 Plastic Package.

AEC-Q101

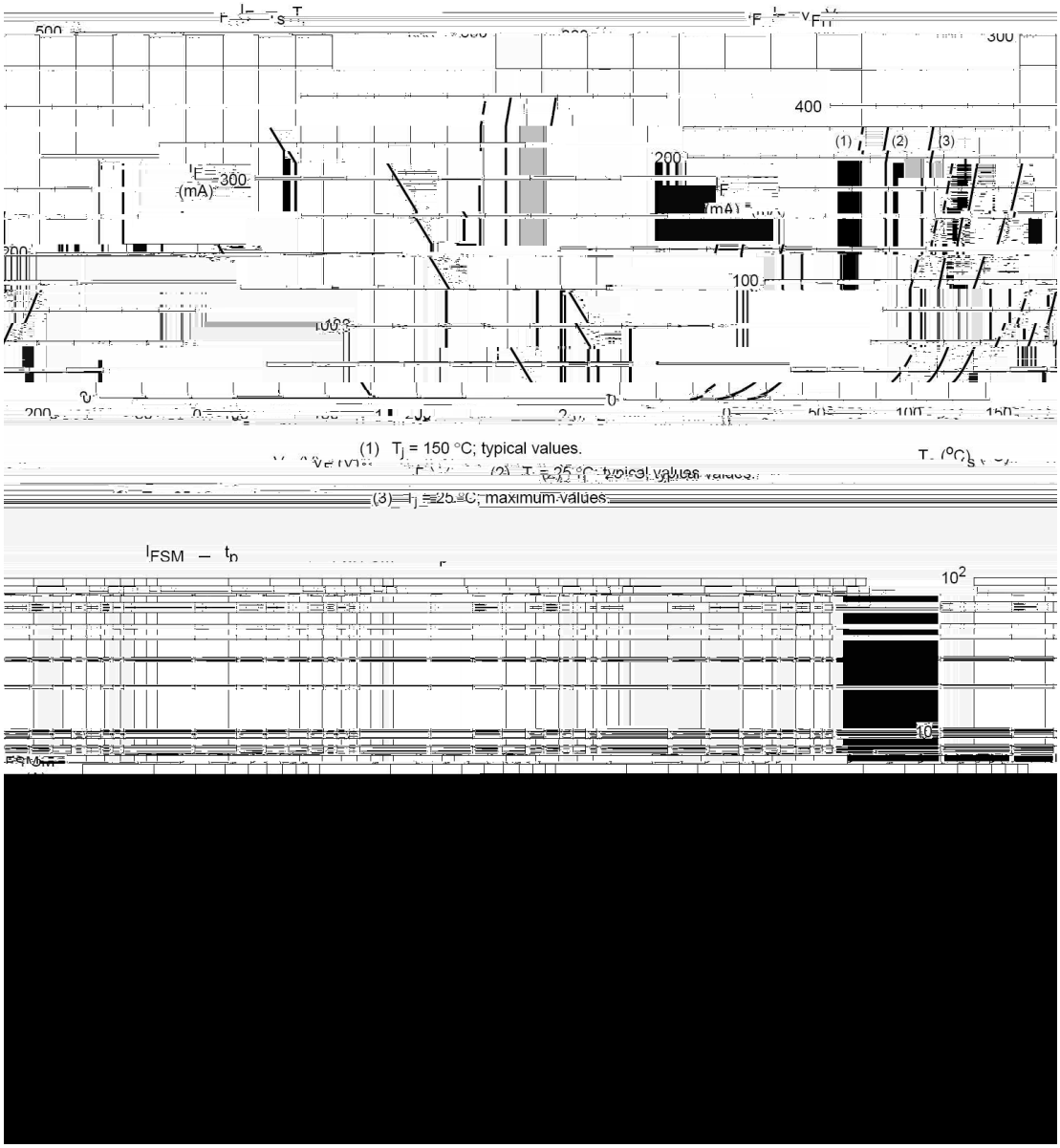
Small signal diode, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

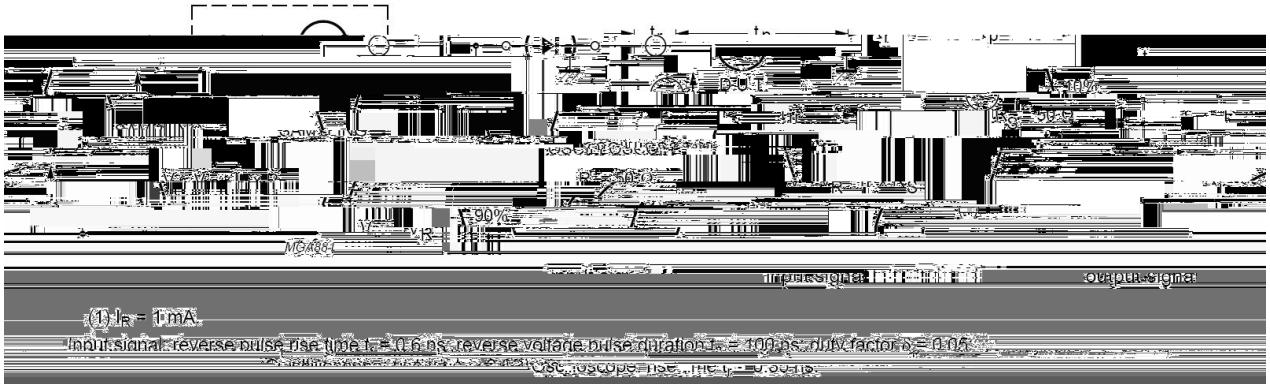
Switching diodes, Meet the stringent requirements of automotive applications.

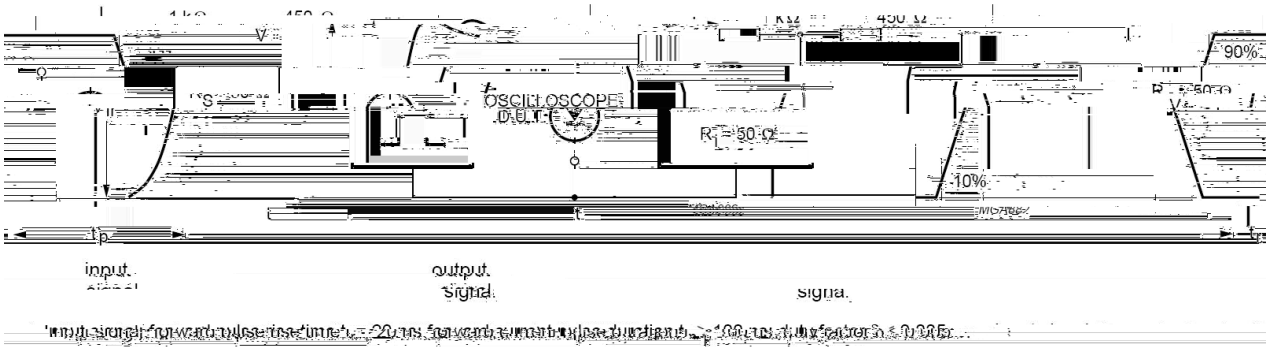
PIN1:Cathode PIN2:Anode

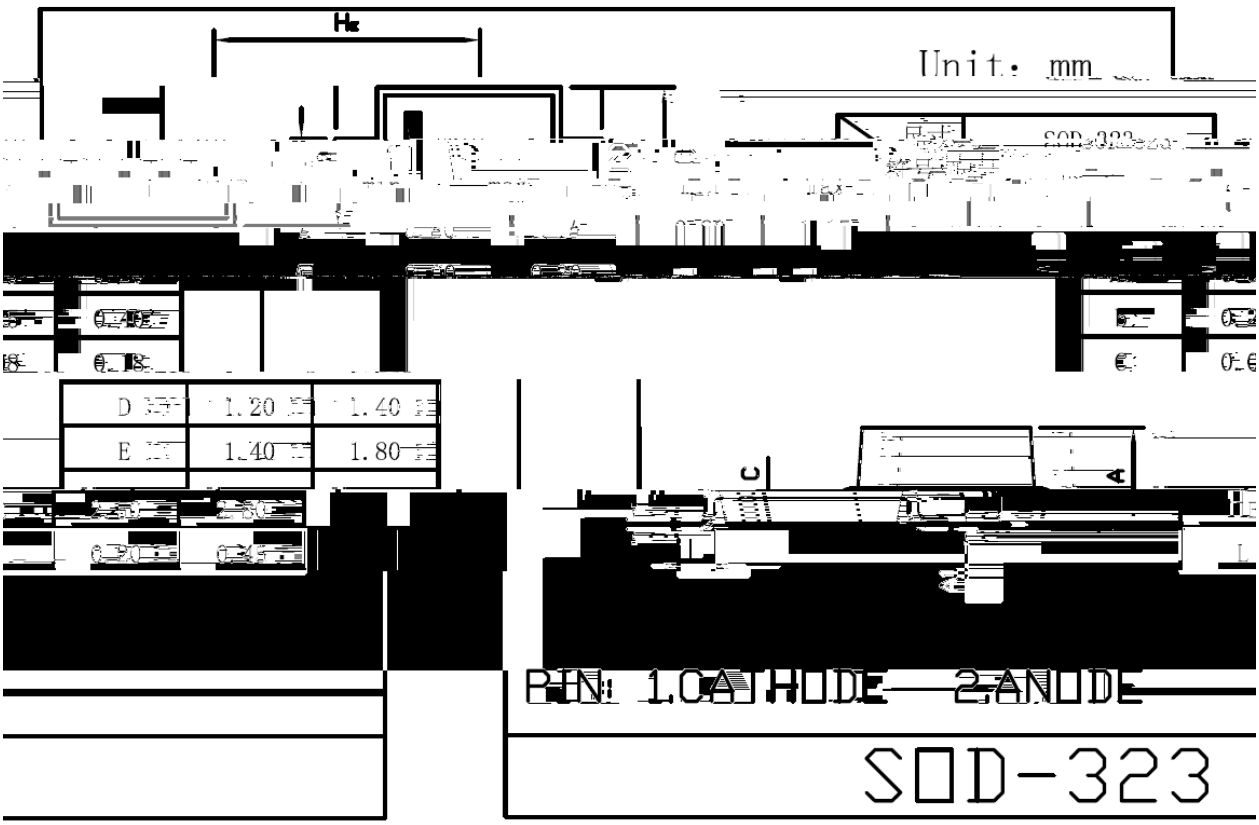
Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}	85	V
Continuous forward current	$I_{F(AV)}$（Ts=90℃）	250	mA
Non-repetitive peak forward current	$I_{FSM(1)(t=1S)}$	0.5	A
	$I_{FSM(2)(t=1mS)}$	1.0	A
Total power dissipation	P_{tot}（Ts=90℃）	400	mW
Thermal resistance from junction to soldering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

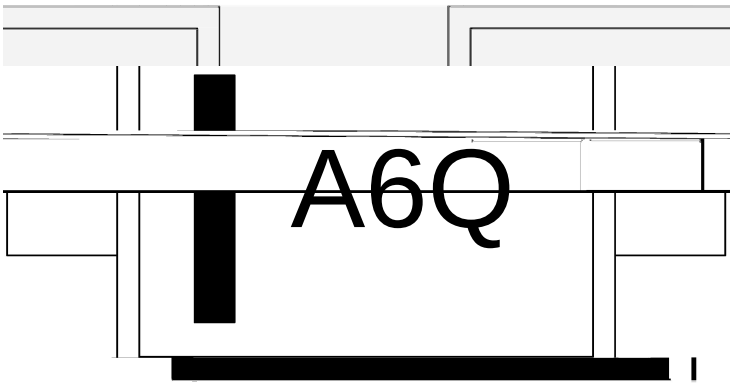
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$_F$=1mA			715	mV
		$_F$=10mA			855	mV
		$_F$=50mA			1.0	V
		$_F$=150mA			1.25	V


500
400
300
200
100
(1)
(2)
(3)
(mA)
(1) Tj = 150 °C; typical values.
(3) Tj = 25 °C; maximum values
IFSM – tp
10²
10


OSCILLOSCOPE
D.U.T.
R_L = 50 Ω
90%
10%
input signal
output signal
(1) I_R = 1 mA.
Input signal: reverse pulse rise time t_r = 0.6 ns, reverse voltage pulse duration t_p = 100 ns, duty factor δ = 0.05
Oscilloscope rise time t_r = 0.35 ns


OSCILLOSCOPE
D.U.T.
R_L = 50 Ω
90%
10%
input
signal
output
signal
Input signal: forward pulse rise time t_r = 20 ns, forward pulse duration t_p = 100 ns, duty factor δ = 0.05


Unit: mm
1.20
1.40
1.40
1.80
PIN 1.CATHODE 2.ANODE
SOD-323



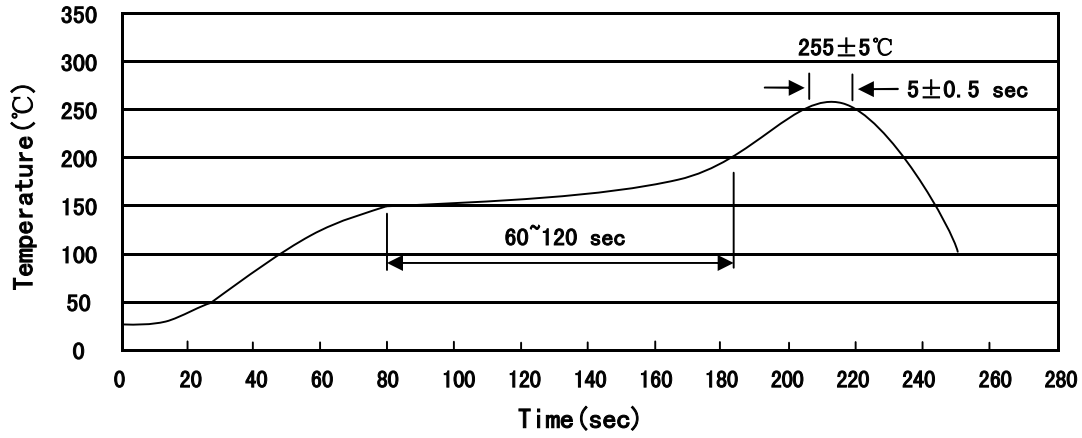
A6

Q

Note:

A6: Product Type Code

Q: Automobile halogen-free product Code



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