

/ Descriptions

SOT-23

Silicon Diode in a SOT-23 Plastic Package.

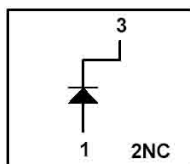
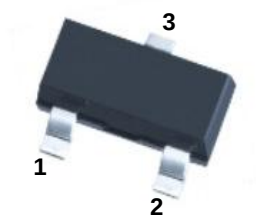
/ Features

AEC-Q101

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

/ Applications

High Conductance Ultra Fast Diode, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit**/ Pinning**

PIN: See Equivalent Circuit.

/ Marking

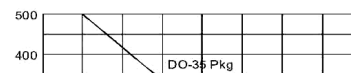
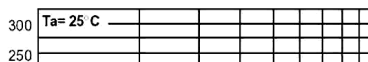
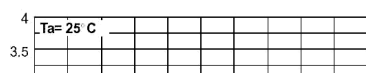
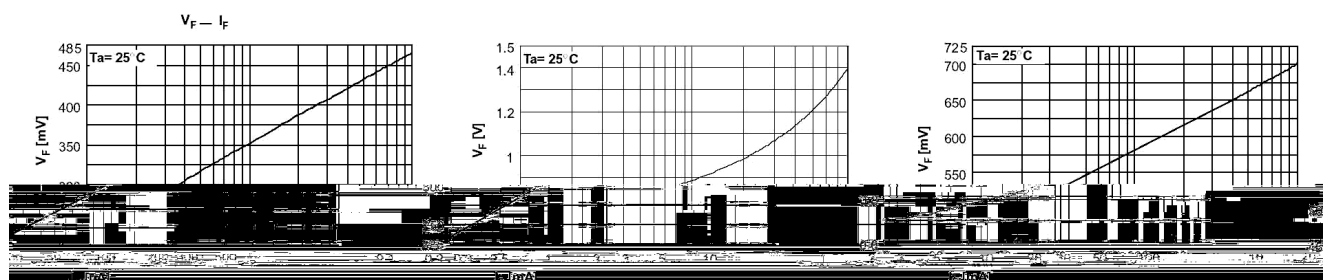
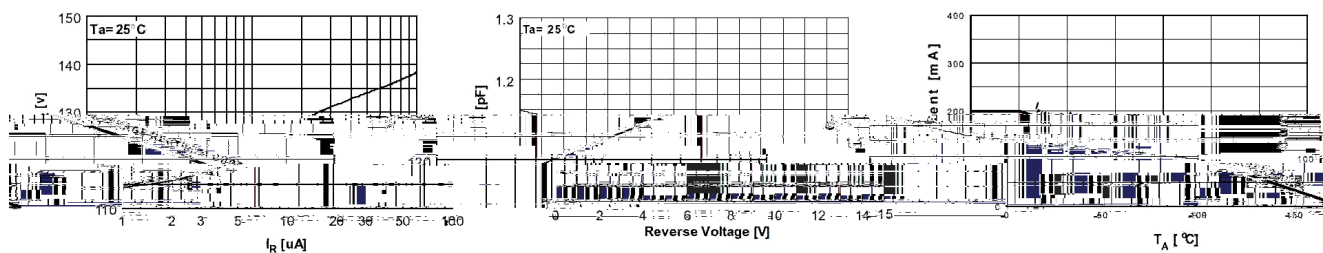
Marking	QA6
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Parameter	Symbol	Rating	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	85	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM(1)}(PW=1S)$	1.0	A
	$I_{FSM(2)}(PW=1mS)$	2.0	A
Power Dissipation	P_D	350	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	357	/W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_R	$I_R=5.0\mu A$	85			V
Forward Voltage	V_F	$I_F=1.0mA$			715	mV
		$I_F=10mA$			855	mV
		$I_F=50mA$			1.0	V

I_F

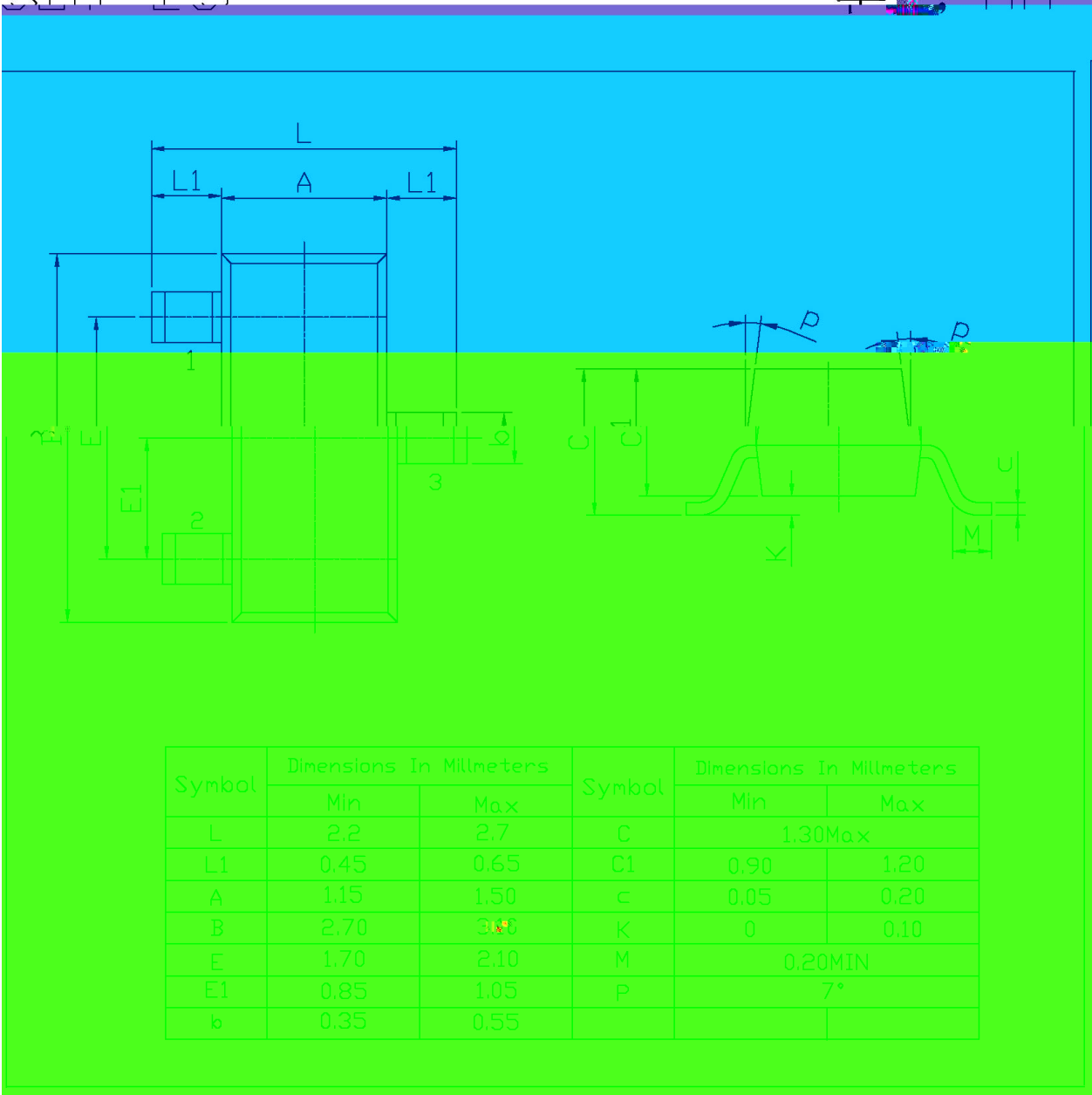
/ Electrical Characteristic Curve



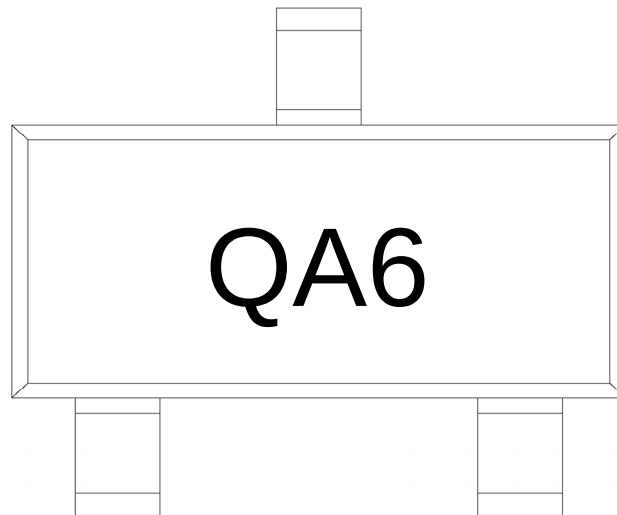
/ Package Dimensions

SOT-23

单位: mm



/ Marking Instructions



Q

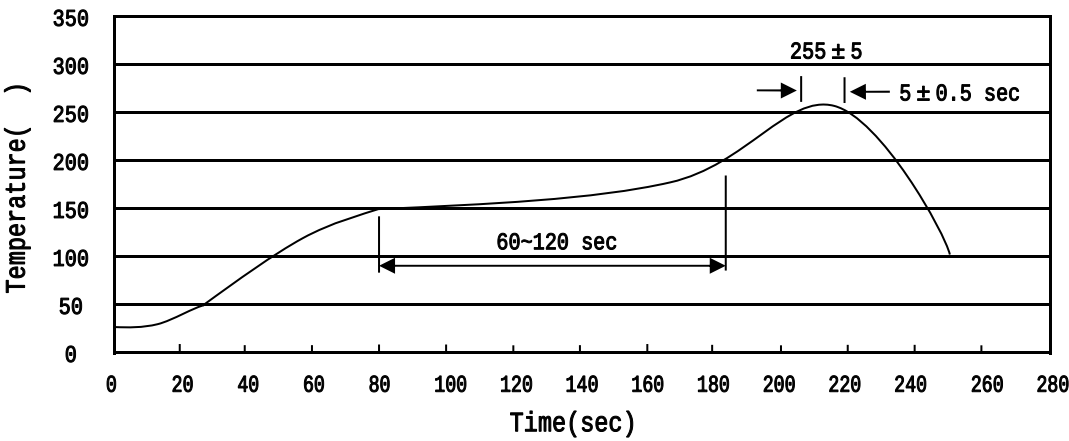
A6

Note:

Q: Automobile halogen-free product Code

A6: Product Type

() / 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.

/ 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
SOT-23	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices