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/ Descriptions

SOT-23

Silicon Diode in a SOT-23 Plastic Package.

/ Features

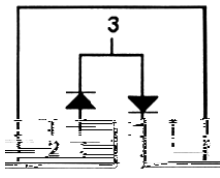
AEC-Q101

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

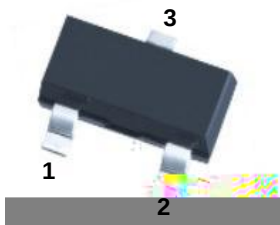
/ Applications

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

/ Equivalent Circuit



/ Pinning



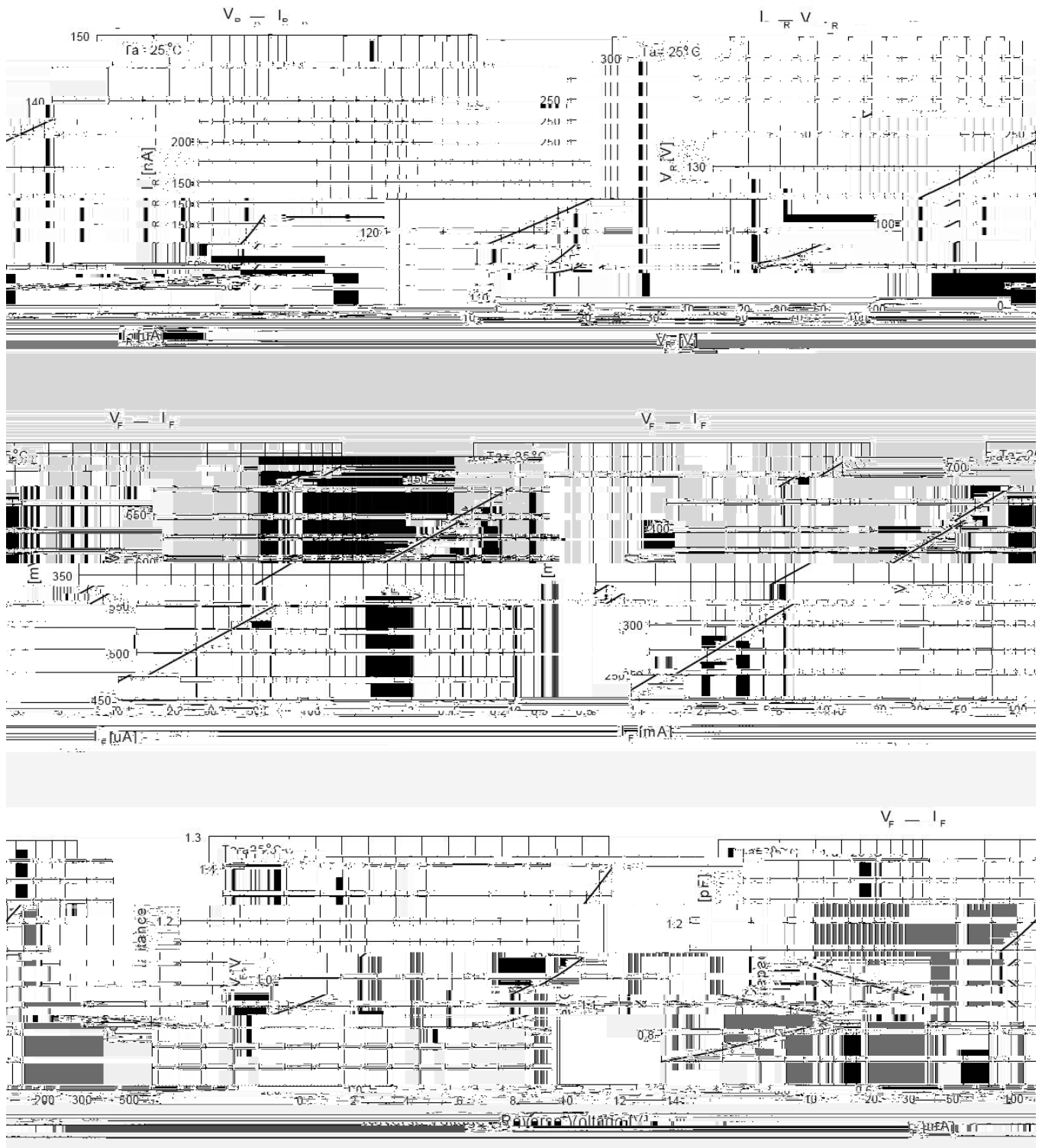
PIN: See Equivalent Circuit.

/ Marking

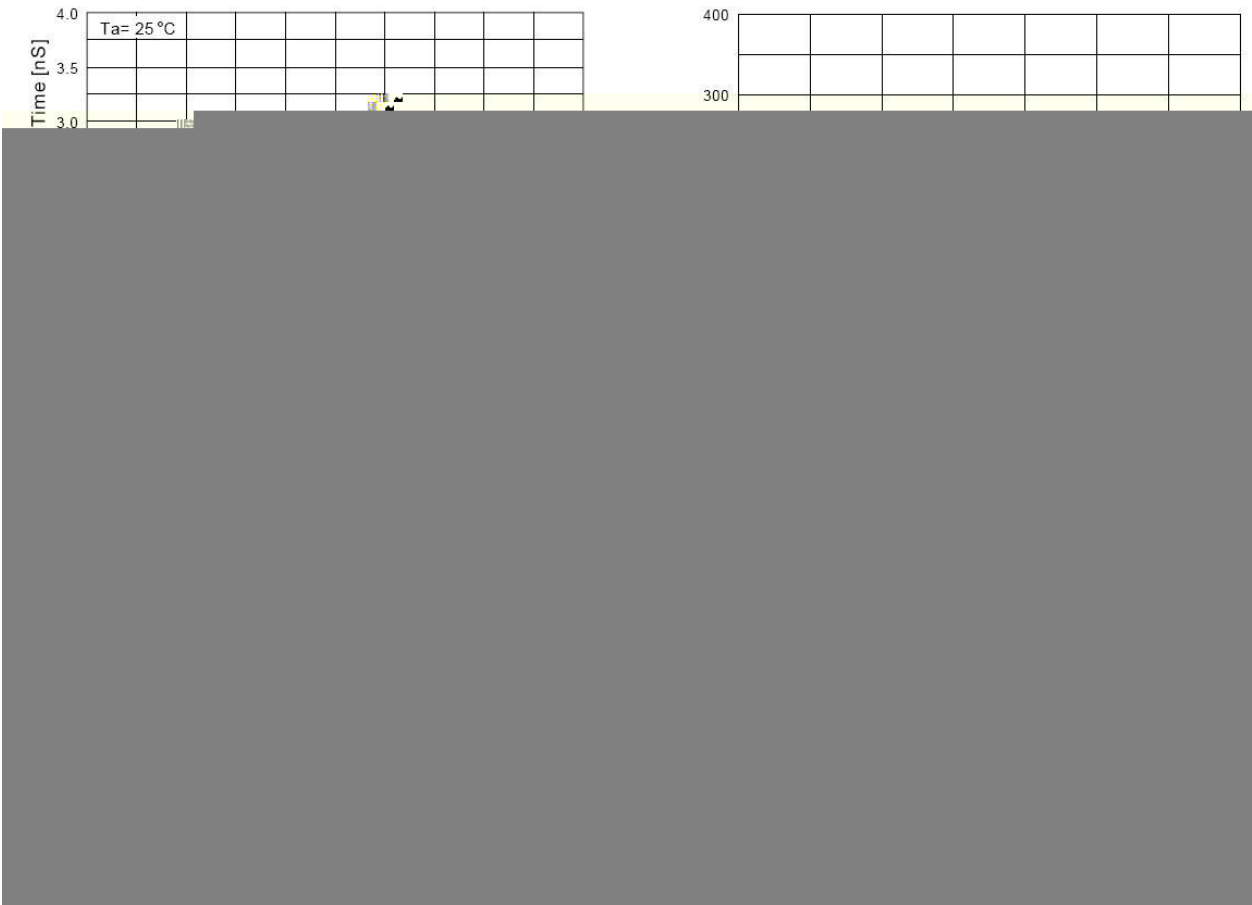
Marking	QA7
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Parameter	Symbol	Rating	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	70	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current ;	$I_{FSM(1)}(\text{pulse width}=1.0S)$	1.0	A
	$I_{FSM(2)}(\text{pulse width}=1.0mS)$	2.0	A
Power Dissipation	P_D	350	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	357	$^{\circ}C/W$
Junction Temperature	T_J	150	$^{\circ}C$
Storage Temperature Range	T_{stg}	-55	

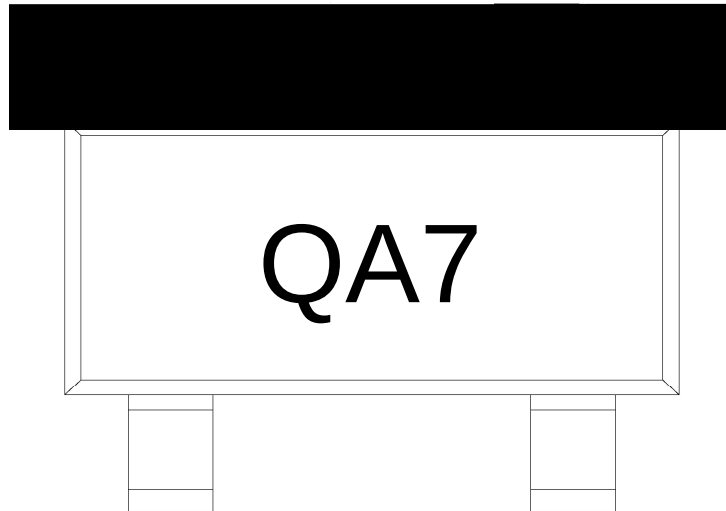
/ Electrical Characteristic Curve



/ Electrical Characteristic Curve



/ Marking Instructions



Q

A7

Note:

Q: Automobile halogen-free product Code

A7: Product Type Code

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

Note:

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

/ Resistance to Soldering Heat Test Conditions

260±5°C	10±1 sec.	Temp.:260±5°C	Time:10±1 sec
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/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/盒	Units/Outer Box 只/盒	Reel	Inner Box 盒	Outer Box 箱