R

/ Descriptions

SOT-23

Silicon Diode in a SOT-23 Plastic Package.

/ Features

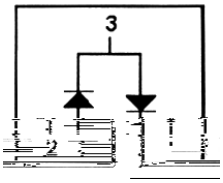
AEC-Q101

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

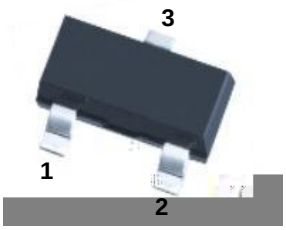
/ Applications

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

/ Equivalent Circuit



/ Pinning



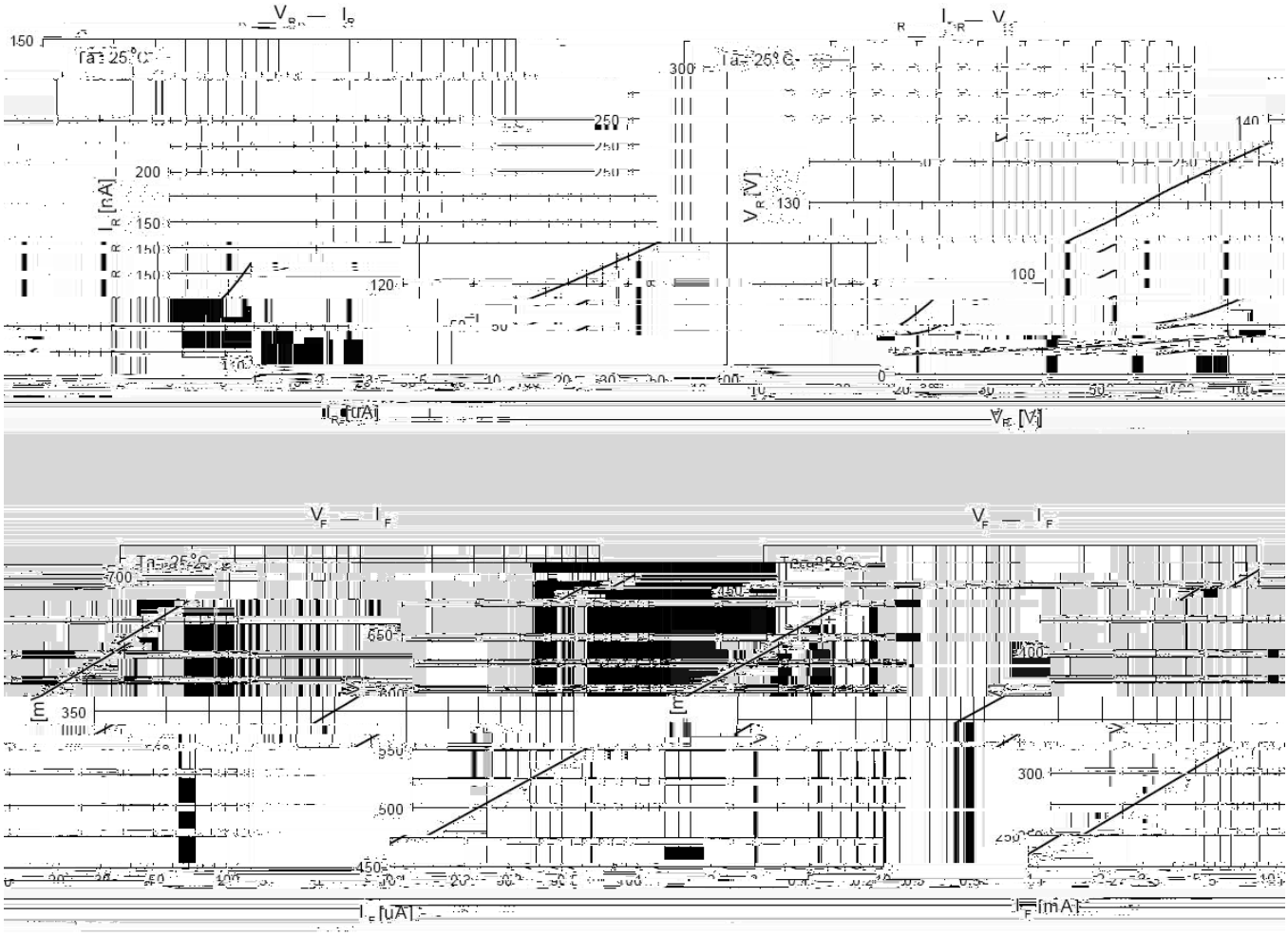
PIN: See Equivalent Circuit.

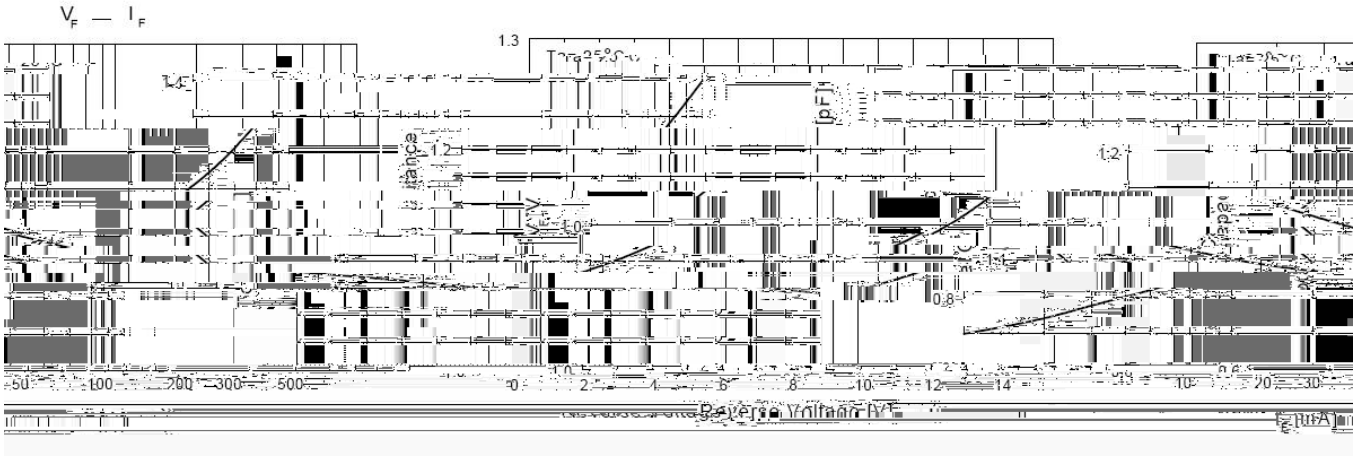
/ Marking

Marking	QA7

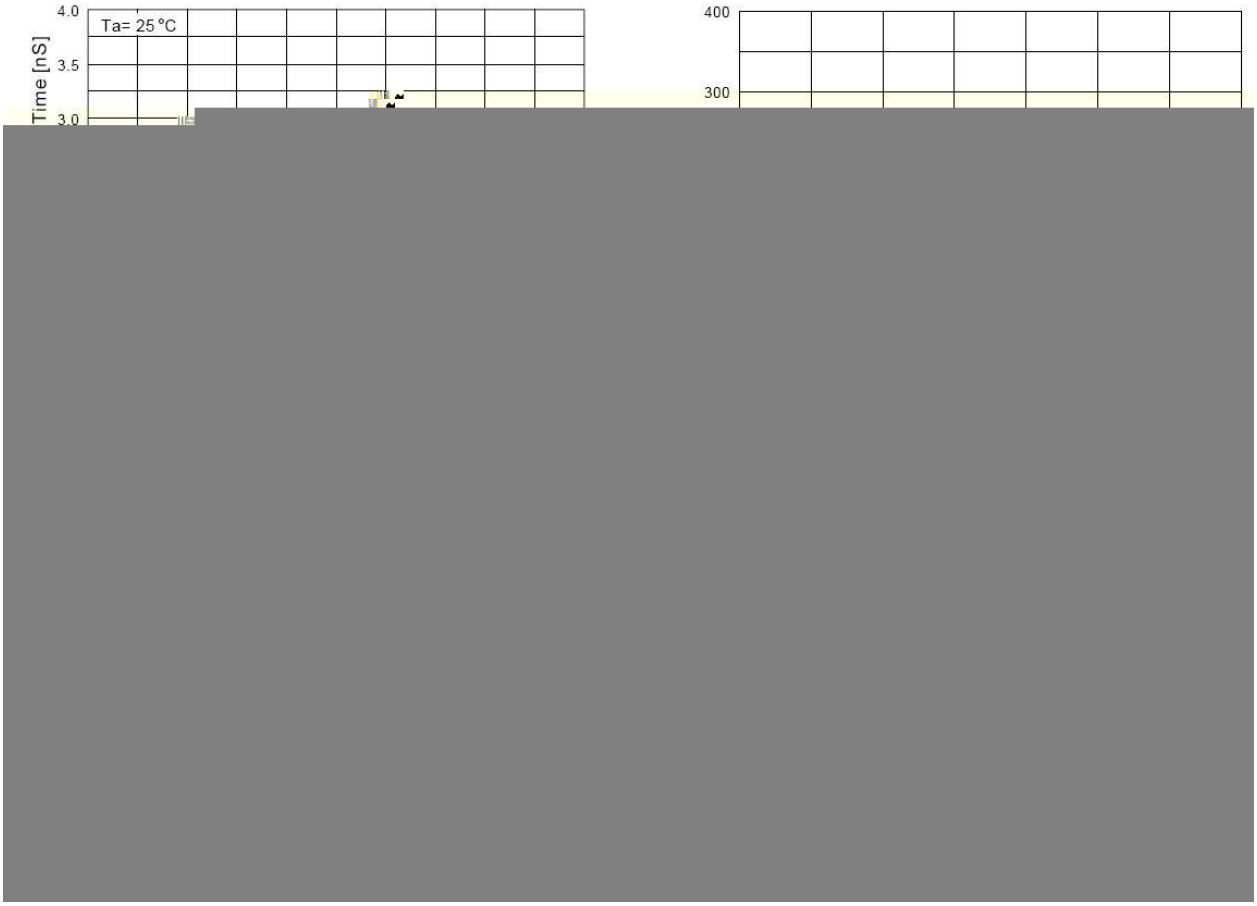
Parameter	Symbol	Rating	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	70	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current ;	$I_{FSM(1)(pulse\ width=1.0S)}$	1.0	A
	$I_{FSM(2)(pulse\ width=1.0mS)}$	2.0	A
Power Dissipation	P_D	350	mW
Thermal Resistance,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

/ Electrical Characteristic Curve

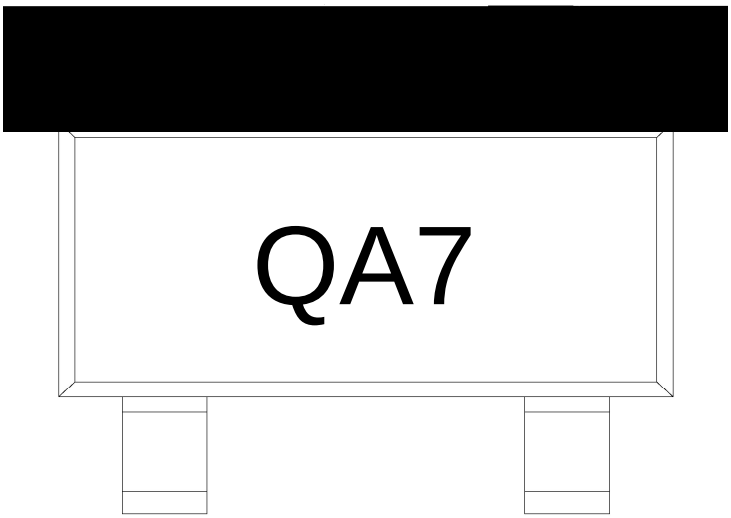




/ Electrical Characteristic Curve



/ 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℃, 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 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/	Units/Outer Box 只/	Reel	Inner Box 盒	Outer Box 箱