

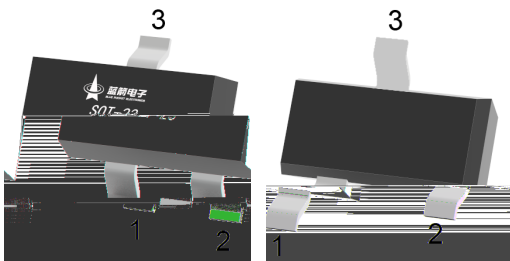
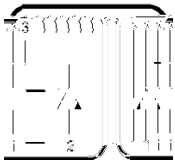
SOT-23

Silicon Diode in a SOT-23 Plastic Package.

AEC-Q101

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

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

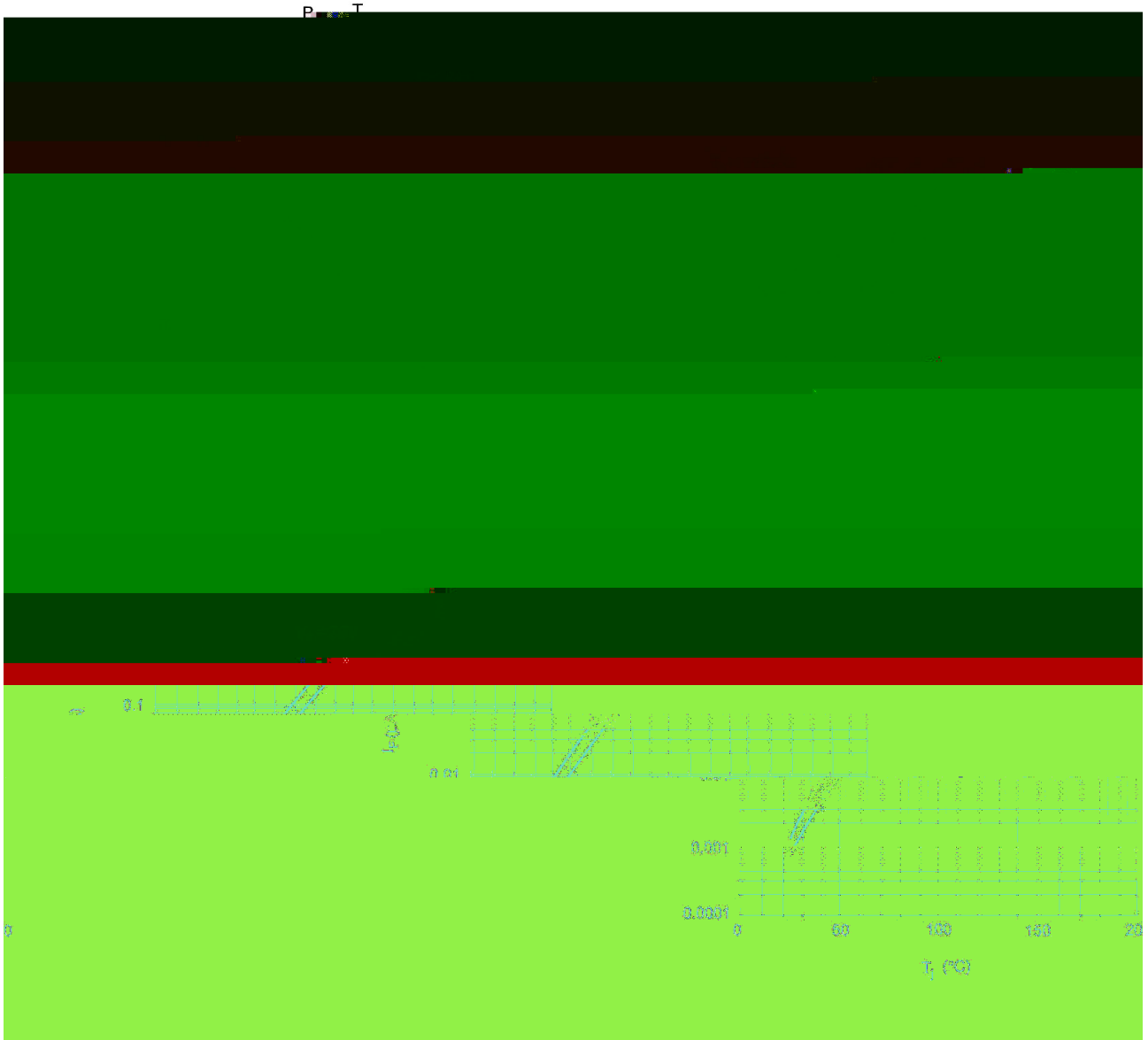


PIN: See Equivalent Circuit.

Marking	QA4
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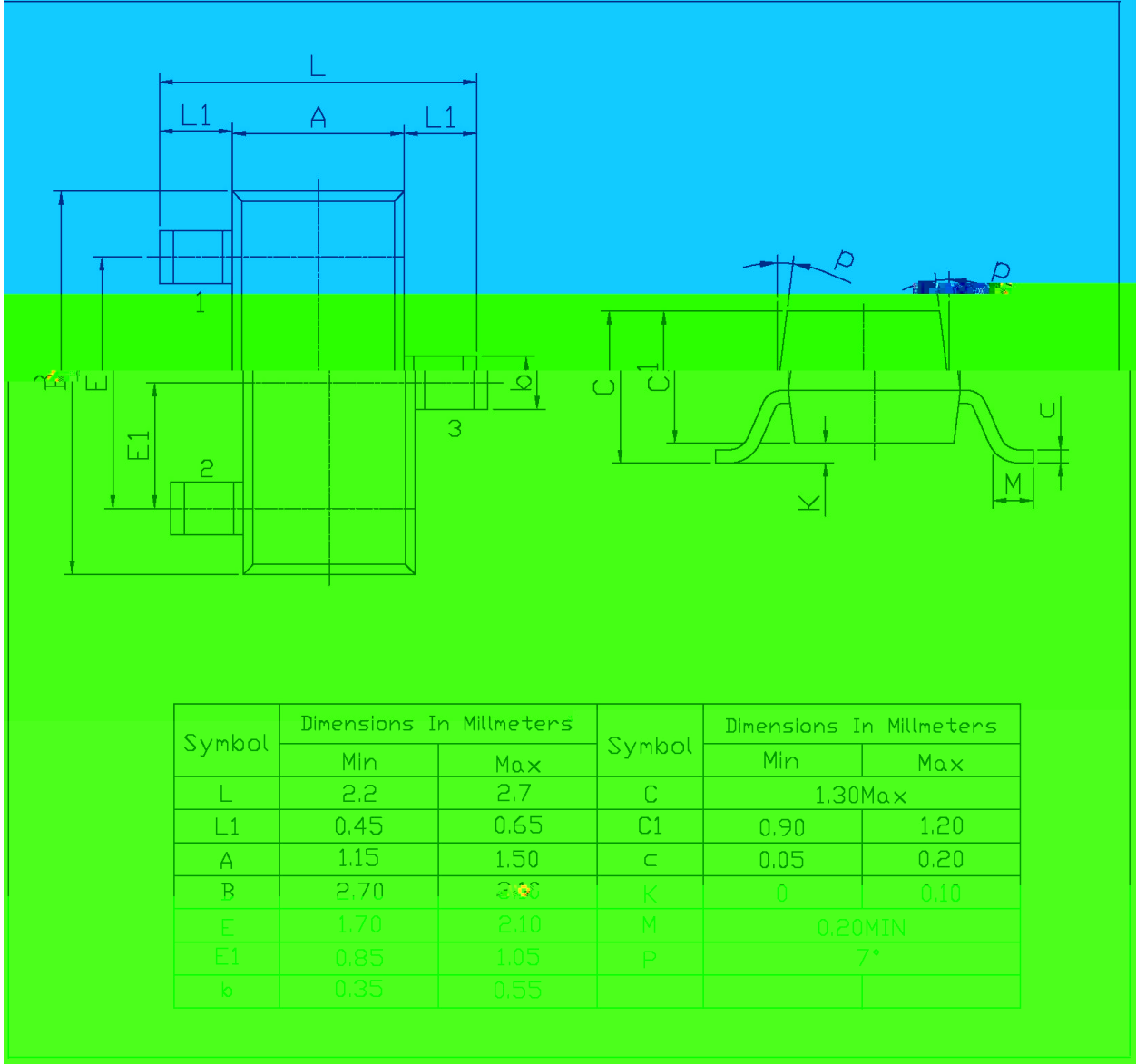
Parameter	Symbol	Rating	Unit
Maximum Repetitive Reverse Voltage	$V_{RRM}$	75	V
Breakdown Voltage	$V_R$	70	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM(1)}$ (pulse width=1.0S)	1.0	A
	$I_{FSM(2)}$ (pulse width=1.0mS)	2.0	A
Power Dissipation	$P_D$	350	mW
Thermal Resistance, Junction to Ambient	$R_{JA}$	357	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	-55~150	°C

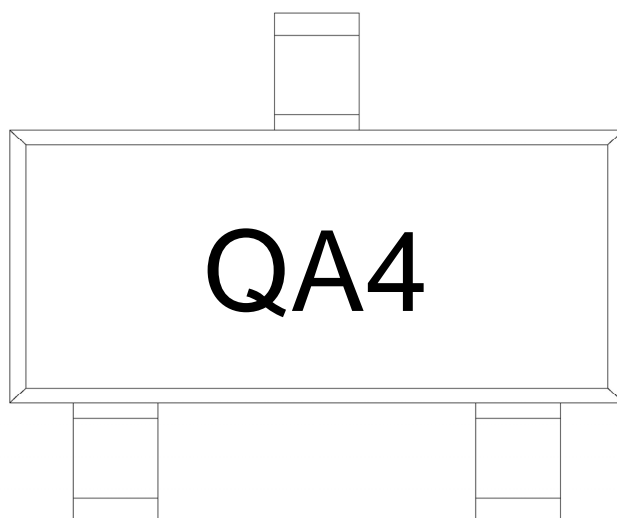
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	$V_R$	$I_R=100\text{ A}$	70			V
Forward Voltage	$V_F$	$I_F=1.0\text{mA}$			715	mV
		$I_F=10\text{mA}$			855	mV
		$I_F=50\text{mA}$			1.0	V
		$I_F=150\text{mA}$			1.25	V
Instantaneous Reverse Current	$I_R$	$V_R=70\text{V}$			5.0	A
		$V_R=25\text{V}$ $T_A=150^\circ\text{C}$			60	A
		$V_R=70\text{V}$ $T_A=150^\circ\text{C}$			100	A
Total Capacitance	$C_T$	$V_R=0$ $f=1.0\text{MHz}$			1.5	pF
Reverse Recovery Time	$t_{rr}$	$I_F=1\text{R}=10\text{mA}$ $I_{RR}=1.0\text{mA}$ $R_L=100$			6.0	ns



SOT-23

单位: mm





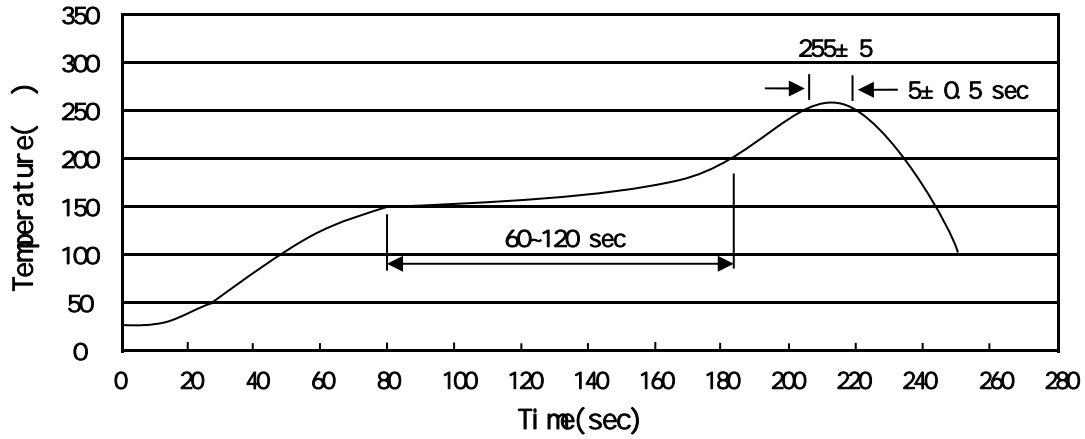
Q

A4

Note:

Q: Automobile halogen-free product Code

A4: Product Type 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 <sup>3</sup> )		
	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	180000	7" x8	180x120x180	390x385x205