BRBAV70Q

Rev.A Jan.-2023

DATA SHEET

/ Descriptions

SOT-23 Silicon Diode in a SOT-23 Plastic Package.

/ Features

AEC-Q101

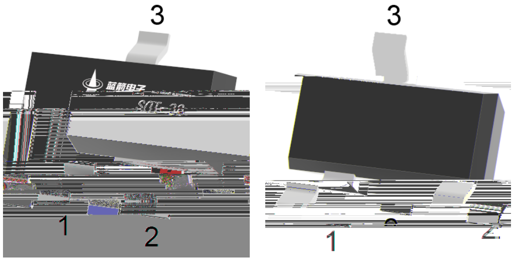
Small signal diode, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

/ Applications

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

/ Equivalent Circuit

/ Pinning



PIN: See Equivalent Circuit.

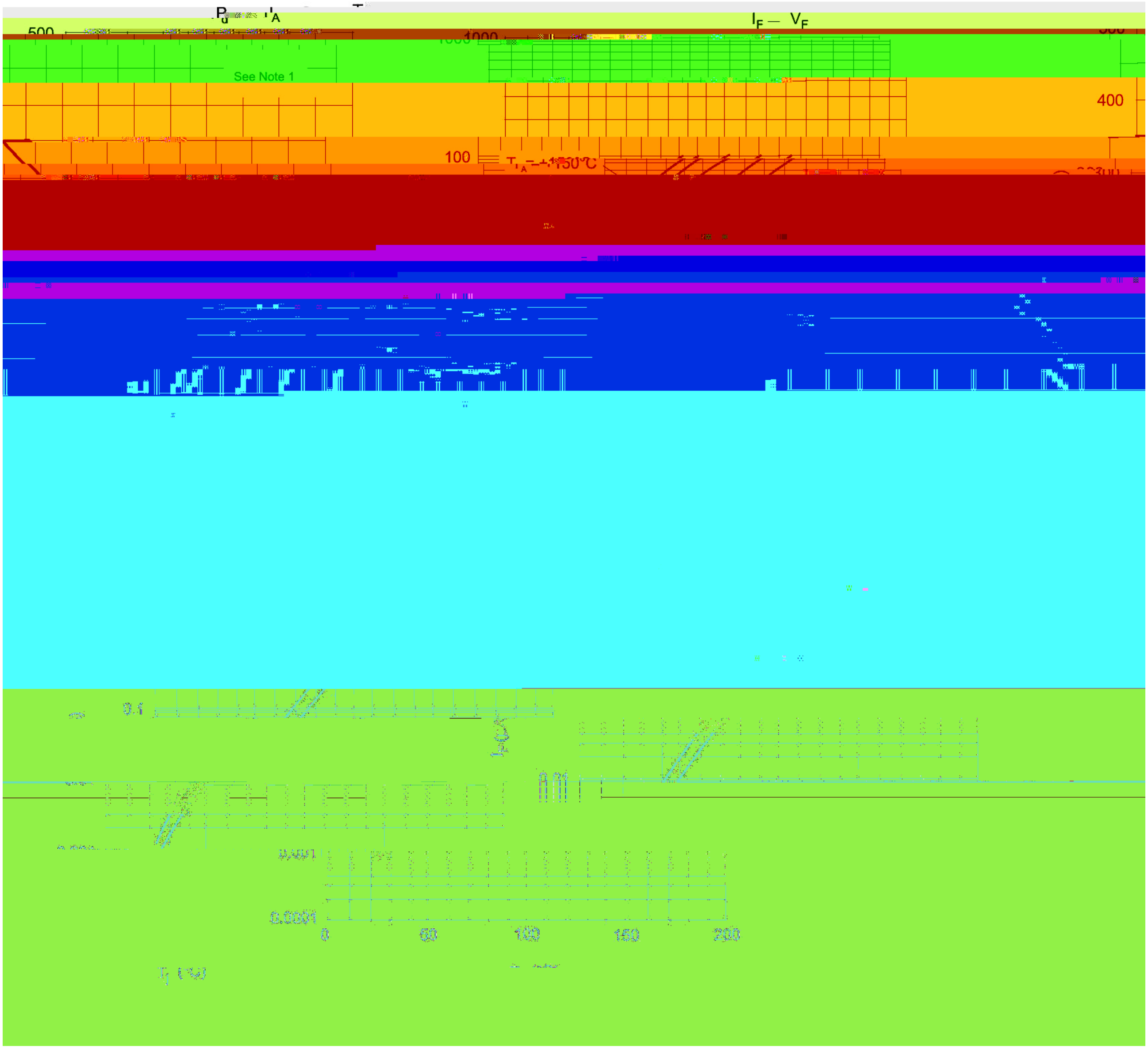
/ Marking

Marking	QA4

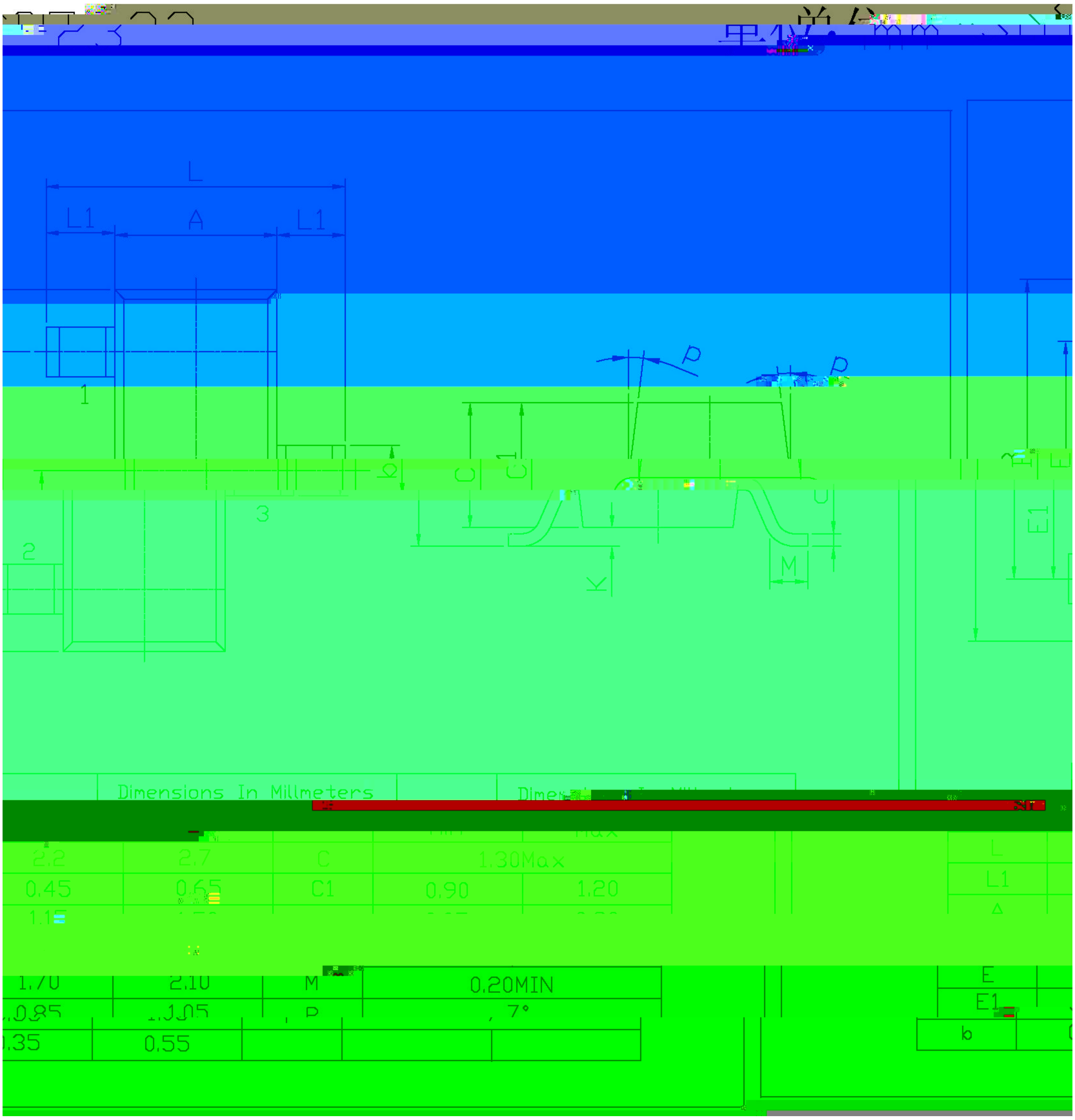
Parameter	Symbol	Rating	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	75	V
Breakdown Voltage	V_R	70	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM(1)(pulse\ width=1.0S)}$	1.0	A
	$I_{FSM(2)(pulse\ width=1.0mS)}$	2.0	A
Power Dissipation	P_D	350	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	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=100μA	70			V
Forward Voltage	V_F	I_F=1.0mA			715	mV
		I_F=10mA			855	mV

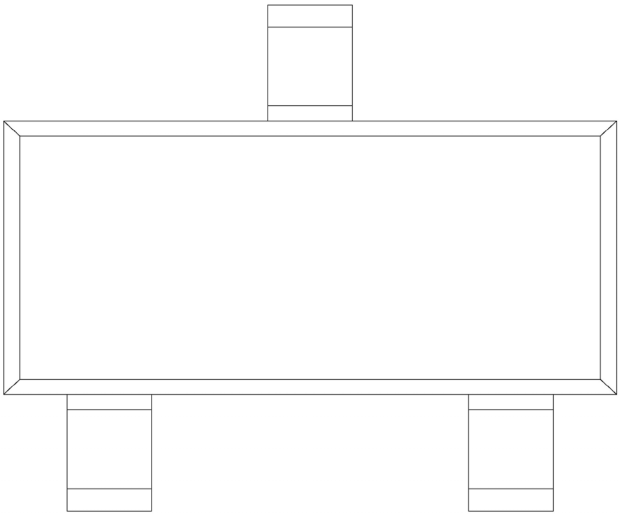
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



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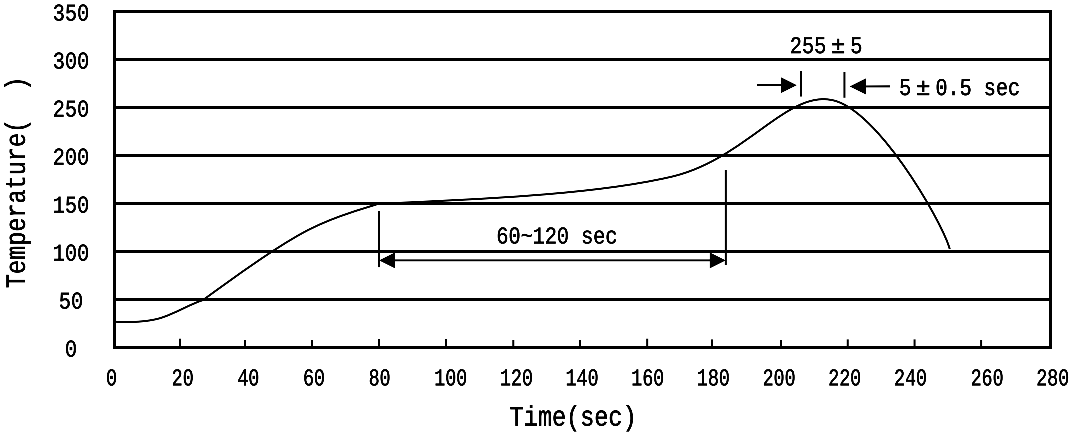
( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



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)		
SOT-23	3,000	10	30,000	6	180000	7 ×8	180×120×180	390×385×205

/ Notices