

Rev.A Apr.-2023

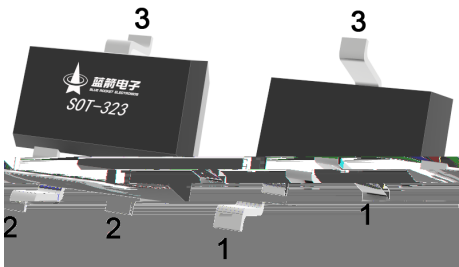
SOT-323

Silicon Diode in a SOT-323 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.

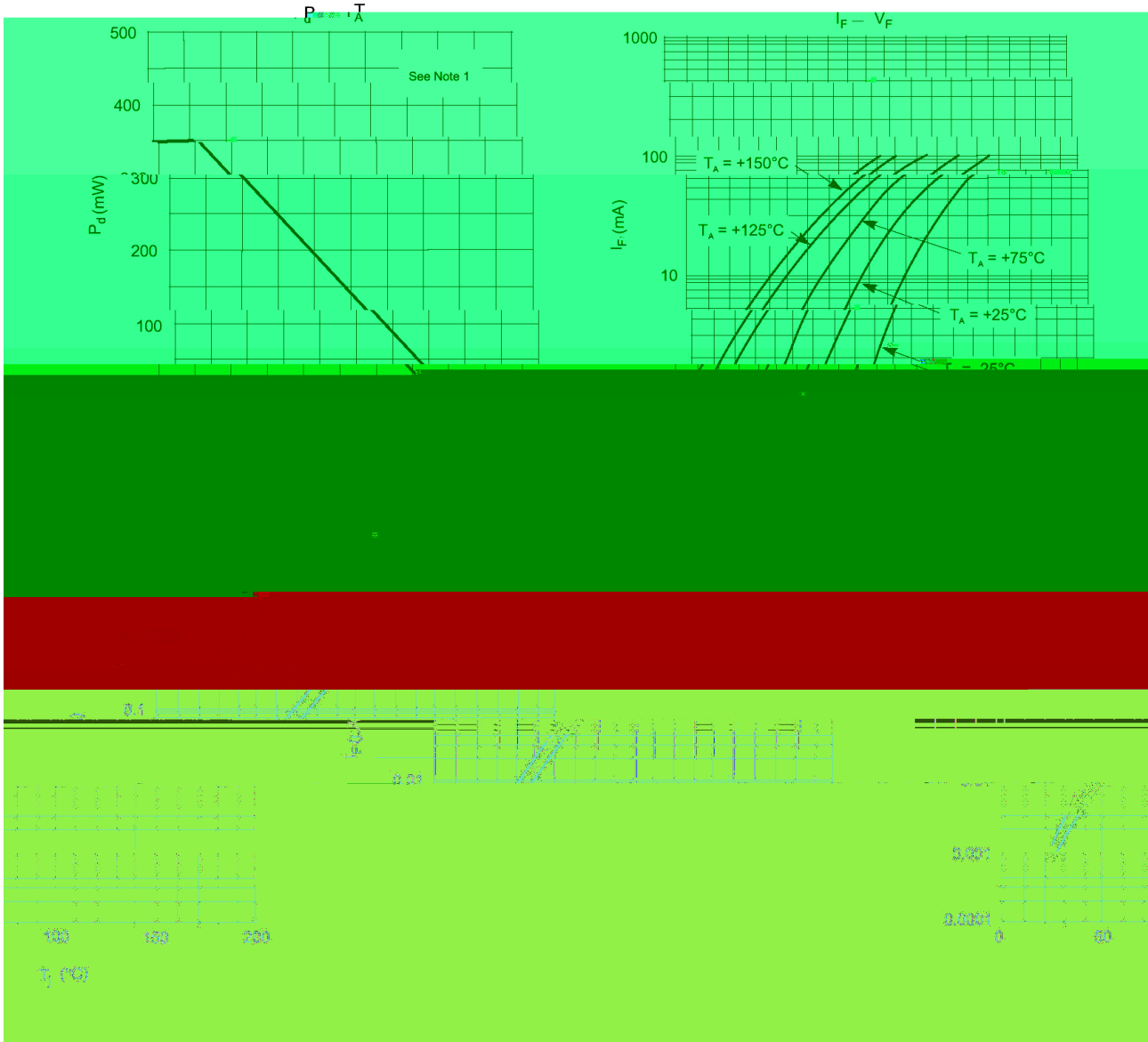


PIN: See Equivalent Circuit.

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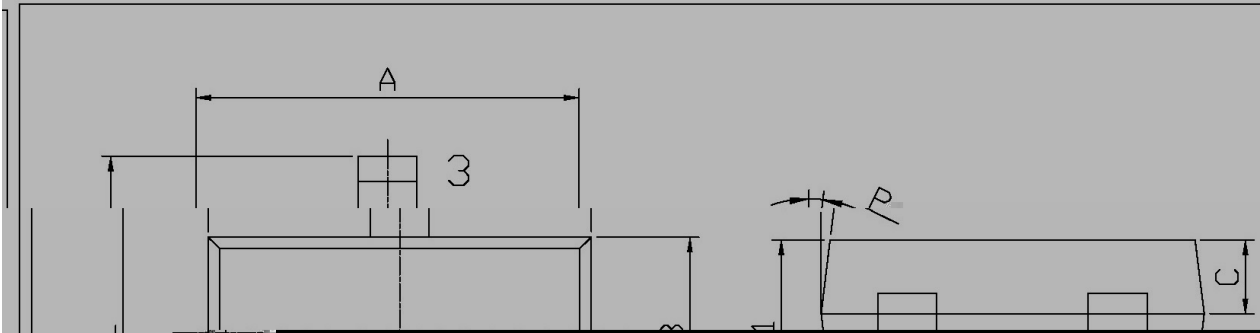
Parameter	Symbol	Rating	Unit
Maximum Repetitive Reverse Voltage	V_{RRM}	75	V
Breakdown Voltage	V_R	70	V
Average Rectified Forward Current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current	$I_{FSM(1)}(\text{pulse width}=1.0S)$	1.0	A
	$I_{FSM(2)}(\text{pulse width}=1.0mS)$	2.0	A
Power Dissipation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

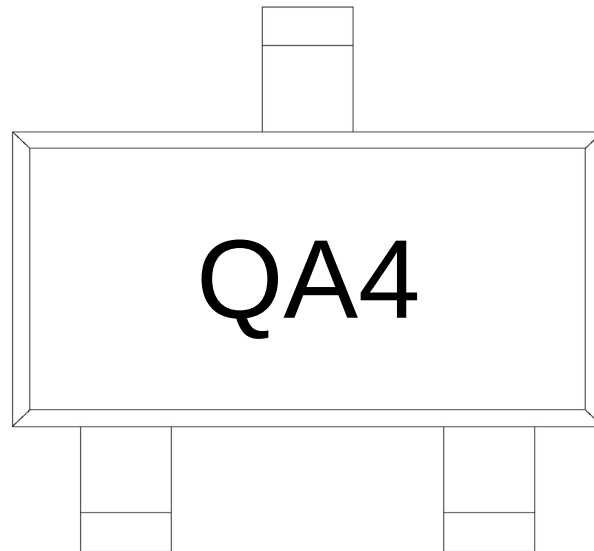
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_R	$I_R=100\mu A$	70			V
Forward Voltage	V_F	$I_F=1.0mA$			715	mV
		$I_F=10mA$			855	mV
		$I_F=50mA$			1.0	V
		$I_F=150mA$			1.25	V
Instantaneous Reverse Current	I_R	$V_R=70V$			5.0	μA
		$V_R=25V \quad T_A=150$			60	μA
		$V_R=70V \quad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



SQT-323

单位: mm





Q

A4

Note:

Q: Automobile halogen-free product Code

A4: Product Type Code

