

Rev.A Jun.-2025

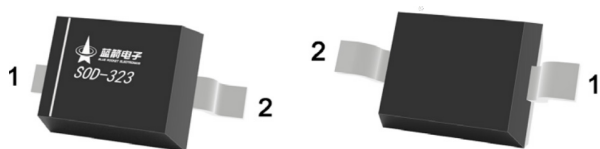
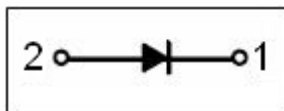
SOD-323

Schottky Diode in a SOD-323 Plastic Package.

AEC-Q101

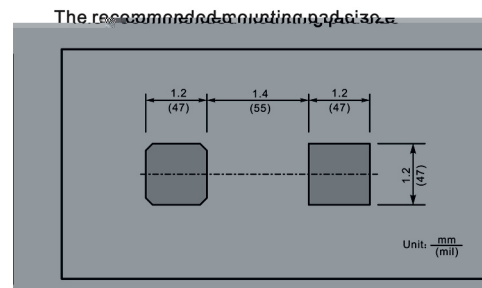
Low forward voltage drop, Fast Switching Time, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

General purpose.



PIN1: Cathode

PIN2: Anode

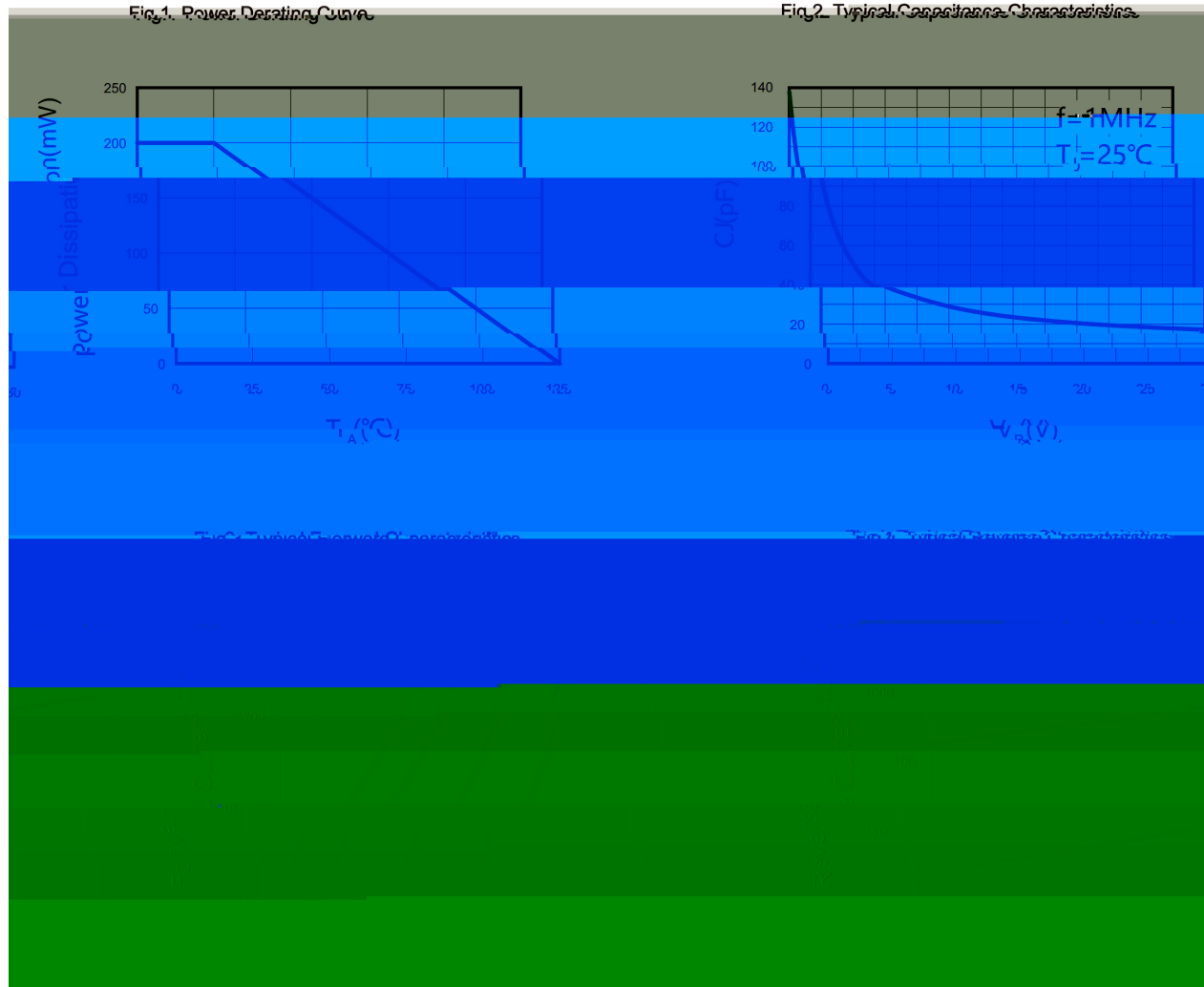


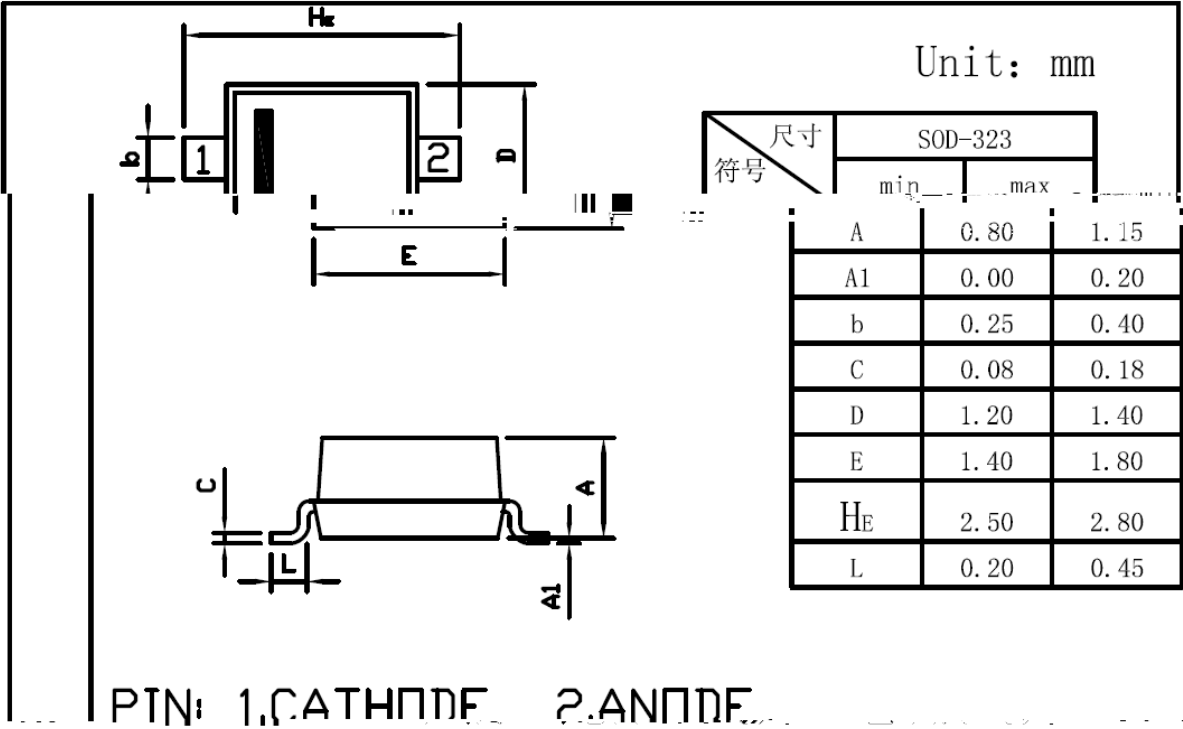
Model	BRRB551VQ-30
Marking	551Q

Parameter	Symbol	Rating	Unit
Peak Reverse Voltage	V_{RM}	30	V
Forward Continuous Current	I_F	0.5	A
Non-Repetitive Peak Forward Surge Current @t = 8.3ms	I_{FSM}	15	A
Power dissipation	P_D	200	mW
Thermal Resistance, Junction to Ambient Air (NOTE 1)	$R_{\theta JA}$	500	K/W
Junction Temperature	T_j	125	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

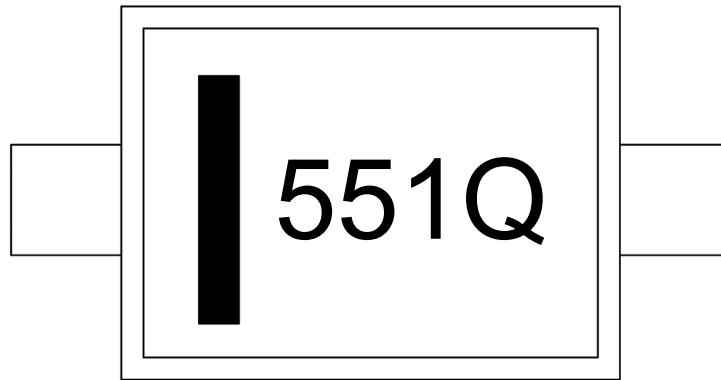
Notes: 1. Part mounted on FR-4 board with recommended pad layout.

Parameter	Symbol	Test Conditions	Rating	Unit
DC Reverse Voltage	V_R	$I_R=100\mu A$	20	V
Maximum Instantaneous Forward Voltage	V_F	$I_F=1.0mA$	0.37	V
		$I_F=500mA$	0.47	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$V_R=20V$	100	μA
Typical Junction Capacitance	C_T	$V_R=4V$ f=1MHz	50(Typ)	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=1mA$ $I_{rr}=1mA$ $R_L=100\Omega$	30	nS





SOD-323



551

Q

Note:

551 Product Type Code

Q: Automobile halogen-free product 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.

260±5

10±1 sec.

Temp.:260±5

Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-323	3,000	10	30,000	6	180,000	7" ×8	180×120×180	390×385×205