BRRB551VQ-30

Rev.A Jun.-2025

/ Absolute Maximum Ratings(Ta=25)

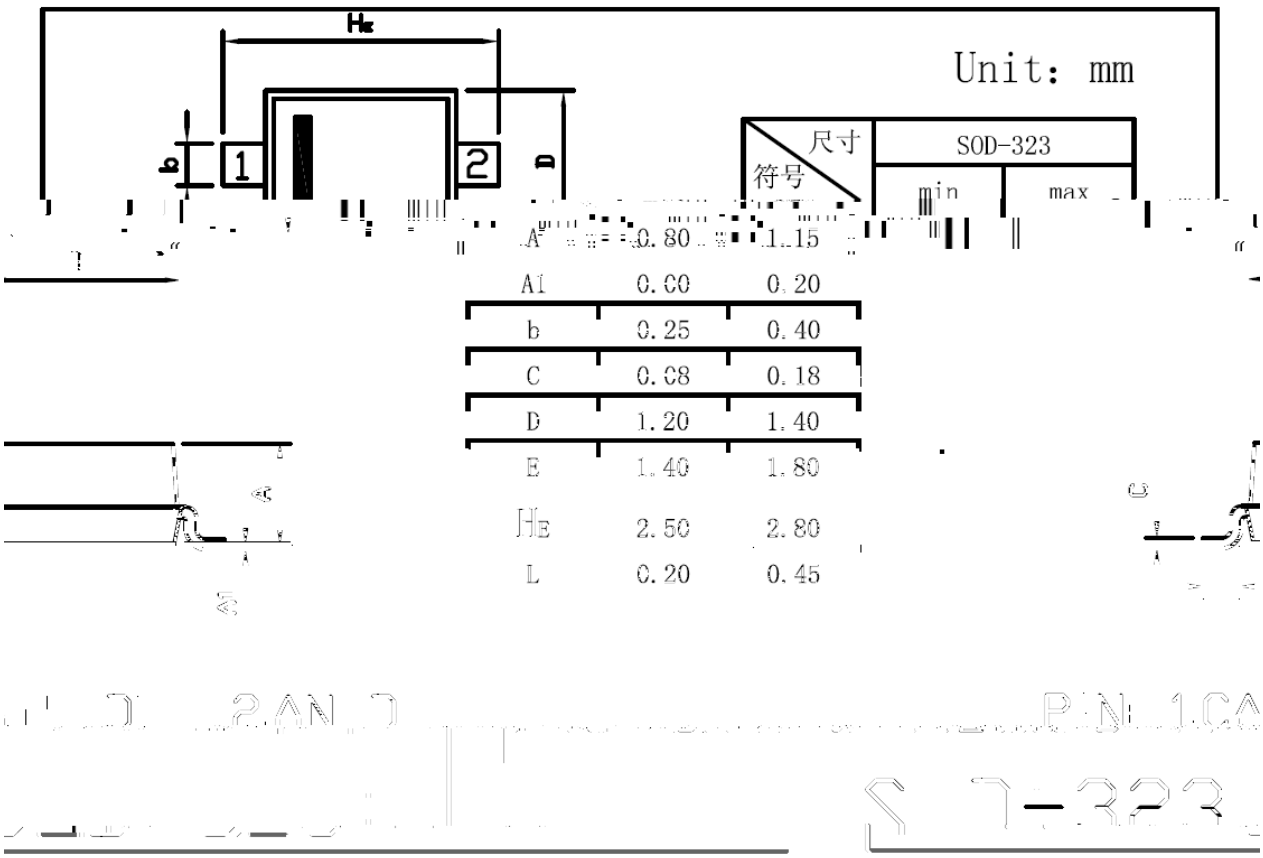
Parameter	Symbol	Rating	Unit
Peak Reverse Voltage	V_{RM}	30	V
Forward Continuous Current	I_F	0.5	A
Non-Repetitive Peak Forward Surge Current @t = 8.3ms	I_{FSM}	15	A
Power dissipation	P_D	200	mW
Thermal Resistance, Junction to Ambient Air (NOTE 1)	R_{dJA}	500	K/W
Junction Temperature	T_j	125	℃
Storage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

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

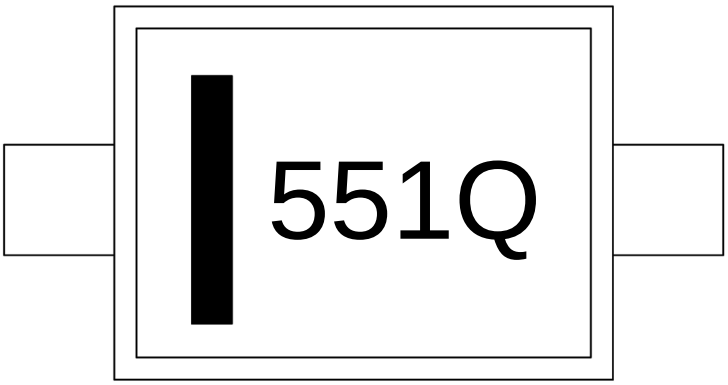
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating	Unit
DC Reverse Voltage	V_R	I_R=100uA	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	uA
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=100q	30	nS

/ Package Dimensions



/ Marking Instructions



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.

/ 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 mm³)
						Reel	Inner Box	Outer Box
SOD-323	3,000	10	30,000	6	180,000	7″ ×8	180×120×180	390×385×205