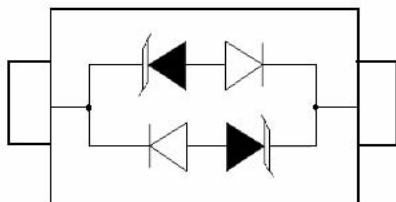


Features

- IEC 61000-4-2(ESD) $\pm 15\text{KV}$ (air), $\pm 8\text{KV}$ (contact)
- 150Watts peak pulse power ($t_p=8/20\mu\text{S}$)
- Ultra low capacitance: 1.5pF maximum
- Low clamping voltage
- Moisture sensitivity level: Level 1
- Weight 5.0 mg
- Small package: SOD-323

Exterior



SOD-323

Part Number and Electrical Parameter

Part Number	$I_{\text{DRM}}@V_{\text{DRM}}$		$V_{\text{BR}}^{①}@I_{\text{R}}$		$V_{\text{c}}@I_{\text{pp}}^{②}$		$V_{\text{c}}@I_{\text{pp}}^{②}$		$C_{\text{o}}^{③}$
	μA	V	V	mA	V	A	V	A	pF
	MAX		MIN		MAX		MAX		MAX
L-BV03CW	20	3	4	1	5.15	1	13.9	8	1.5

Absolute maximum ratings measured at $T=25^{\circ}\text{C}$ RH = 45%-75% (unless otherwise noted).

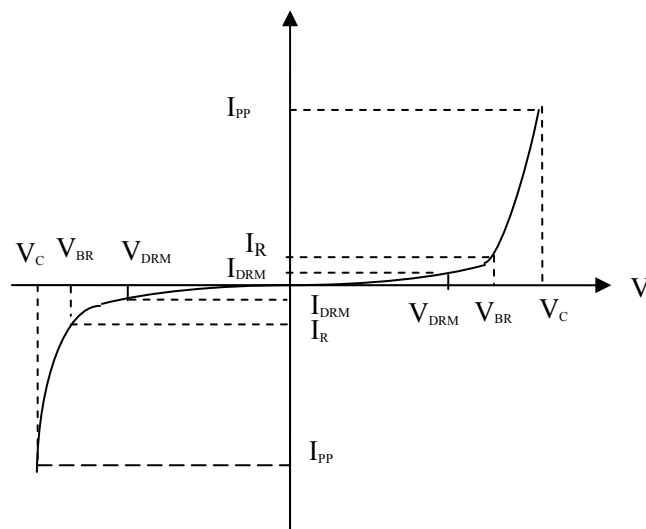
① V_{BR} is measured at $I_{\text{R}}=1\text{mA}$

② Surge Waveform: 8/20 μS .

③ Off-state capacitance is measured in $V_{\text{DC}}=0\text{V}$, $V_{\text{RMS}}=1\text{V}$, $f=1\text{MHz}$

V-I Curve

Parameters	Definition
V_C	Clamping Voltage
I_{pp}	Surge Waveform 8/20 μs
V_{DRM}	Stand-off Voltage
V_{BR}	Breakdown Voltage
I_{DRM}	Reverse Leakage Current
I_R	Test Current
P_{pp}	Peak Pulse Power Dissipation



Thermal Considerations

symbol	Parameter	Value	Unit
T_J	Operating Junction Temperature Range	-55 to +150	$^{\circ}C$
T_S	Storage Temperature Range	-55 to +150	$^{\circ}C$

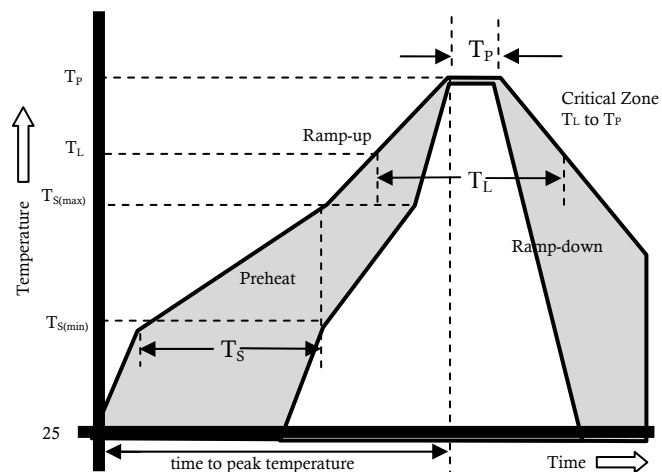
Environmental Characteristics

Testing items	Technical standards
High Temperature Reverse Bias Test	Temperature: $150 \pm 3^{\circ}C$ Bias= $80\%V_{DRM}$ Time:168H
High Temperature Life Test	Temperature: $150^{\circ}C$ Time:168H
High-low Temperature Cycle Test	Temperature: From $-40^{\circ}C$ to $125^{\circ}C$ Dwell time : 30min,10cycles
High Temperature &High Humidity Test	Temperature: $85^{\circ}C$ Humidity:85% Time:168H
Pressure Cooker Test	Temperature: $121^{\circ}C$, 2atm. Humidity:100% Time:24H
Resistance of Soldering Heat	Temperature: $260 \pm 5^{\circ}C$ Time of dip soldering: 10s, 3times

Note: The above testing items can be specified by customer's special request

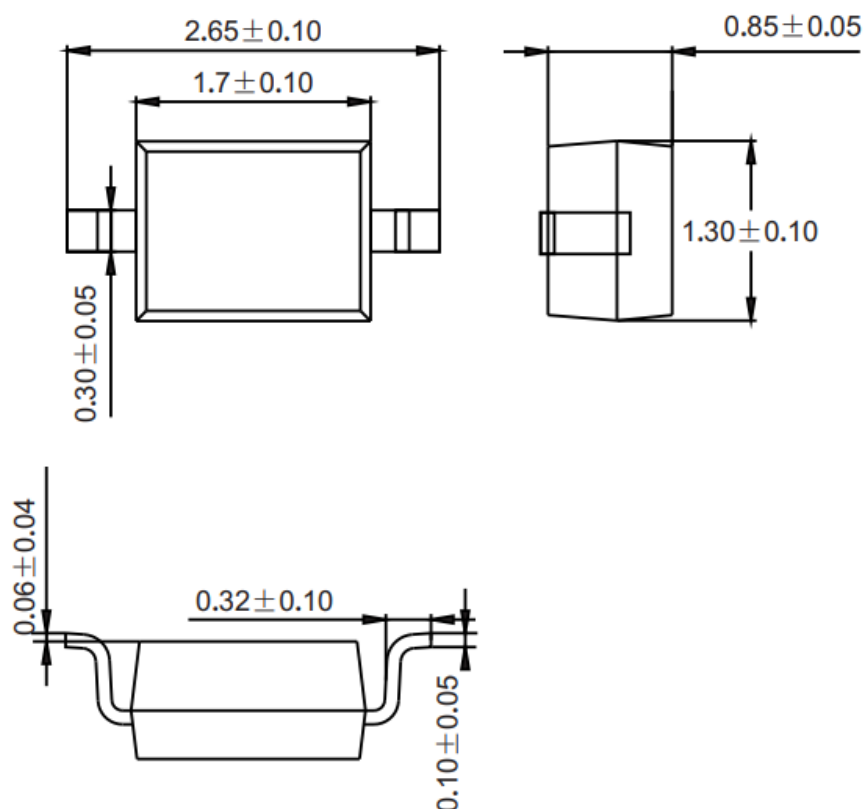
Reflow Profile

Reflow Condition		Pb-Free assembly
Pre Heat	Temperature Min	150°C
	Temperature Max	200°C
	Time (min to max)	60 – 180 secs
Average ramp up rate (Liquidus) T _{amp} (T _L) to peak		3°C/s max
T _S (max) to T _L - Ramp-up Rate		3°C/s max
Reflow	- Temperature (T _L) (Liquidus)	217°C
	- Temperature (T _L)	60 – 150 secs
Peak Temperature (T _P)		260+0/-5 °C
Time within 5°C of actual peak Temperature (T _P)		30secs
Ramp-down Rate		6°C/s max
Time 25°C to peak Temperature (T _P)		8 min max.
Do not exceed		260°C



Package Outline Dimensions (unit: mm)

SOD323



Mounting Pad Layout (unit: mm)

