

### Features

- Low leakage current
- Low clamping voltage
- Complies with following standards:
  - IEC61000-4-2 (ESD) immunity test
    - Air discharge:  $\pm 30\text{kV}$
    - Contact discharge:  $\pm 30\text{kV}$
  - IEC61000-4-5 (surge) 7A (8/20 $\mu\text{s}$ )
- Stand-off voltage: 30V
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

### Applications

- Personal Digital Assistants
- Digital Cameras
- Notebooks and Handhelds
- Audio Players
- Peripheral

### Mechanical data

- Package: SOD-323
- Lead Finish: Lead Free
- UL Flammability Classification Rating 94V-0

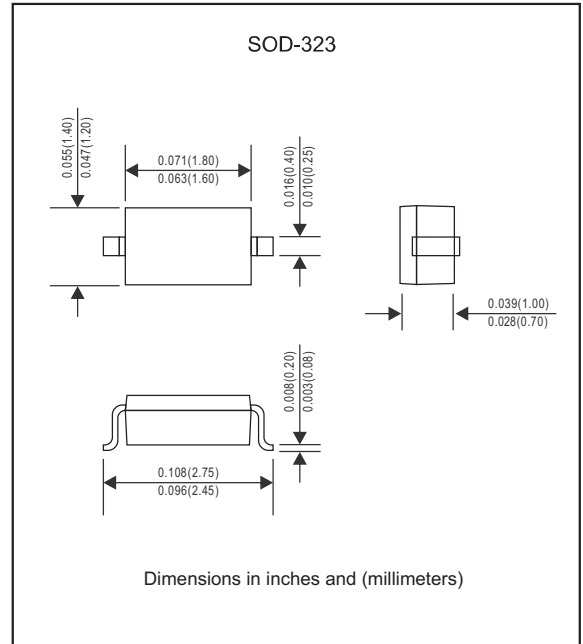
### Maximum ratings (at $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power ( $t_p = 8/20\mu\text{s}$ )	$P_{pk}$	350	W
Peak pulse current ( $t_p = 8/20\mu\text{s}$ )	$I_{PP}$	7	A
ESD according to IEC61000-4-2 air discharge	$V_{ESD}$	$\pm 30$	KV
ESD according to IEC61000-4-2 contact discharge		$\pm 30$	
Junction temperature	$T_J$	-40~125	$^\circ\text{C}$
Storage temperature	$T_{STG}$	-55~150	$^\circ\text{C}$

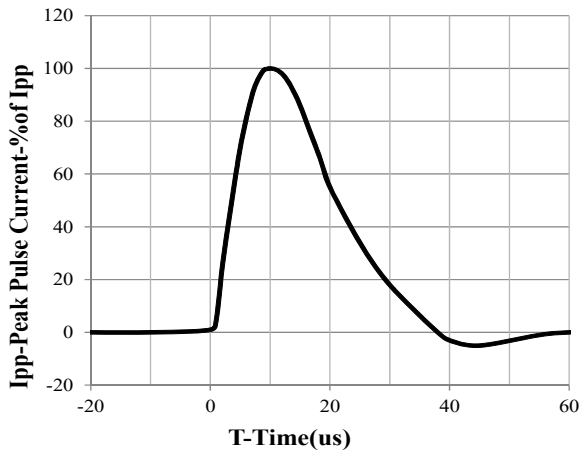
### Electrical characteristics (at $T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse Standoff Voltage	$V_{RWM}$	V				30
Reverse breakdown voltage	$V_{BR}$	V	$I_T = 1\text{mA}$	32	33.5	38
Reverse leakage current	$I_R$	$\mu\text{A}$	$V_{RWM} = 30\text{V}$			0.1
Clamping voltage	$V_{CL}$	V	$I_{PP} = 1\text{A}, t_p = 8/20\mu\text{s}$		35	38
			$I_{PP} = 7\text{A}, t_p = 8/20\mu\text{s}$		45	50
Junction capacitance	$C_J$	pF	$V_R = 0\text{V}, f = 1\text{MHz}$		15	20

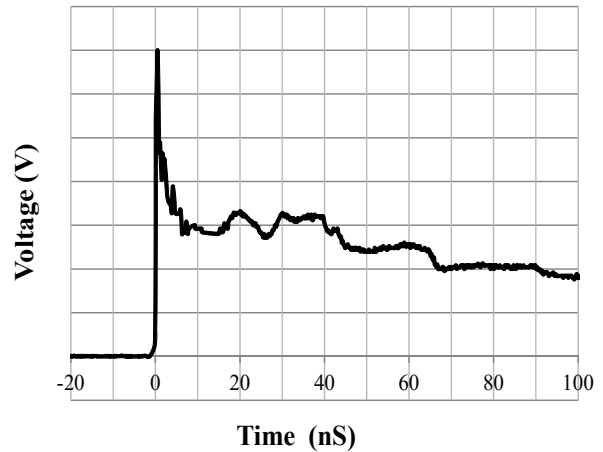
### Package outline



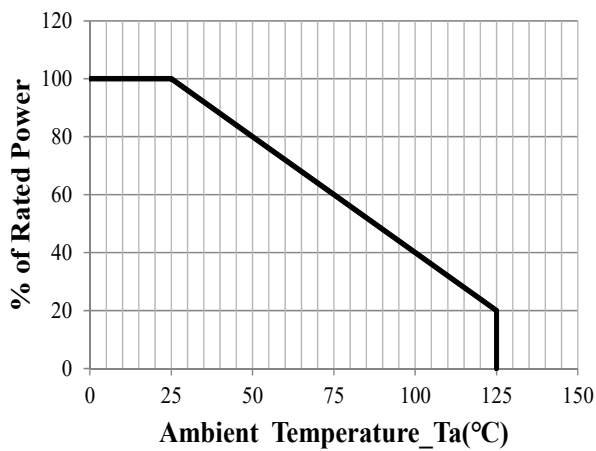
## Characteristic Curves



**8/20us Pulse Waveform**


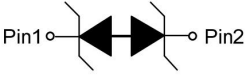


**IEC61000-4-2 Pulse Waveform**



**Power Derating Curve**

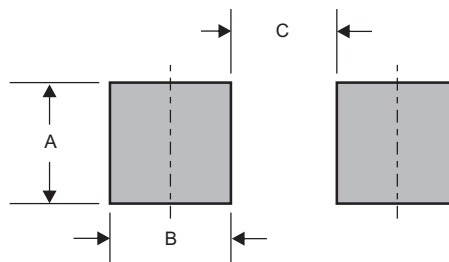
## Pinning information

Pin	Simplified outline	Symbol
Bi-Directional		

## Marking

Type number	Marking code
ESD3Z30C-Q1	30C

## Suggested solder pad layout



Dimensions in inches and (millimeters)

PACKAGE	A	B	C
SOD-323	0.020 (0.50)	0.031 (0.80)	0.063 (1.60)