ESD3Z30C

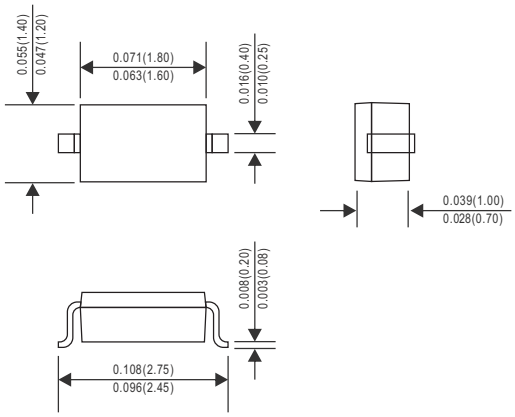
Surface Mount Bi-Directional TVS
For ESD Protection Diode -30V

Features

- Low leakage current
- Low clamping voltage
- Complies with following standards:
  - IEC61000-4-2 (ESD) immunity test
    - Air discharge: ±30kV
    - Contact discharge: ±30kV
  - IEC61000-4-5 (surge) 7A (8/20μs)
- Stand-off voltage: 30V
- Compliant to Halogen-free

Package outline

SOD-323



Dimensions in inches and (millimeters)

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

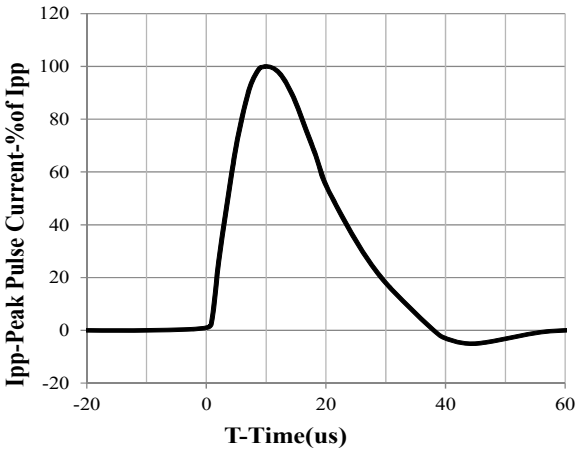
Maximum ratings (at T_A =25°C unless otherwise noted)

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

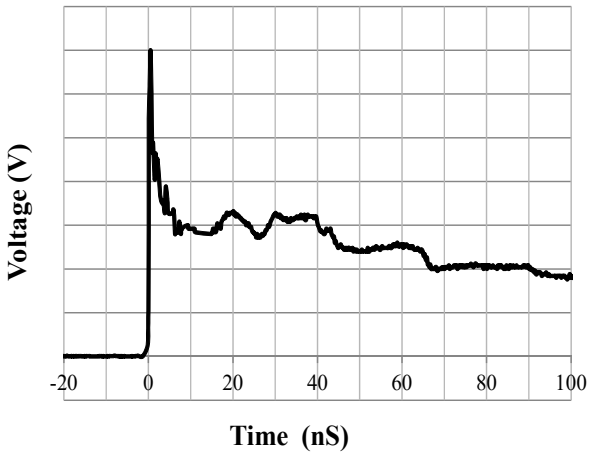
Electrical characteristics (at T_A =25°C unless otherwise noted)

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

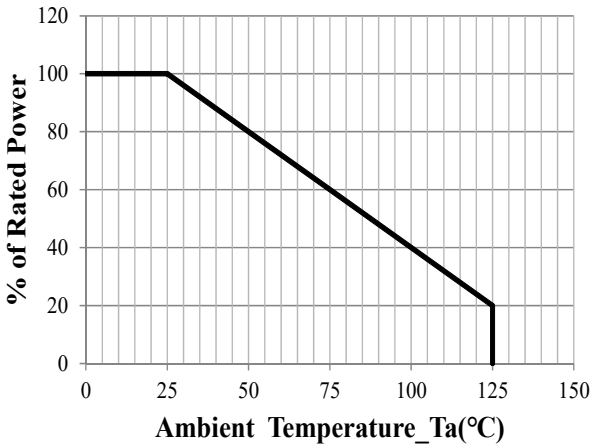
Characteristic Curves



8/20us Pulse Waveform



IEC61000−4−2 Pulse Waveform



Power Derating Curve

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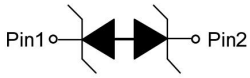
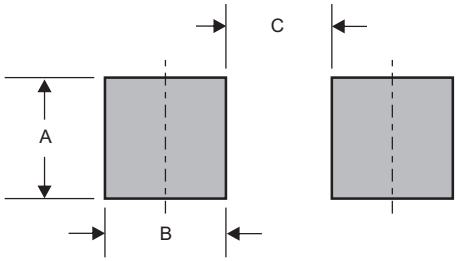
Pinning information

Pin	Simplified outline	Symbol
Bi-Directional		

Marking

Type number	Marking code
ESD3Z30C	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)