

Description

The PDCSD60C is a 60V bi-directional TVS diode, utilizing leading monolithic silicon technology to provide fast response time and low ESD clamping voltage, making this device an ideal solution for protecting voltage sensitive data and power line. The PDCSD60C complies with the IEC 61000-4-2 (ESD) standard with ± 25 kV air and ± 20 kV contact discharge. It is assembled into an ultra-small lead-free SOD-323 package. The small size and high ESD surge protection make PDCSD60C an ideal choice to protect cell phone, digital cameras, audio players and many other portable applications.

Features

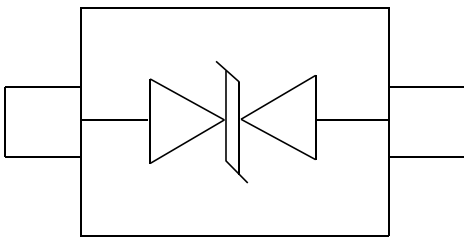
- 200W peak pulse power (8/20 μ s)
- Protects one data or power line
- Ultra low leakage: nA level
- Operating voltage: 60V
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test Air discharge: ± 25 kV
 - Contact discharge: ± 20 kV
 - IEC61000-4-5 (Lightning) 2A (8/20 μ s)
- RoHS Compliant

Mechanical Characteristics

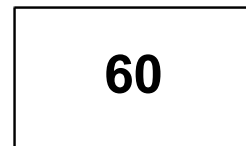
- Package: SOD-323
- Case Material: "Green" Molding Compound.
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Marking Information: See Below

Applications

- Cellular Handsets and Accessories
- Personal Digital Assistants
- Notebooks and Handhelds
- Portable Instrumentation
- Peripherals
- Digital Cameras
- Audio Players

Dimensions and Pin Configuration

Circuit and Pin Schematic

Marking Information

60=Device Marking Code

Ordering Information

Part Number	Marking	Packaging	Reel Size
PDCSD60C	60	3000/Tape & Reel	7 inch

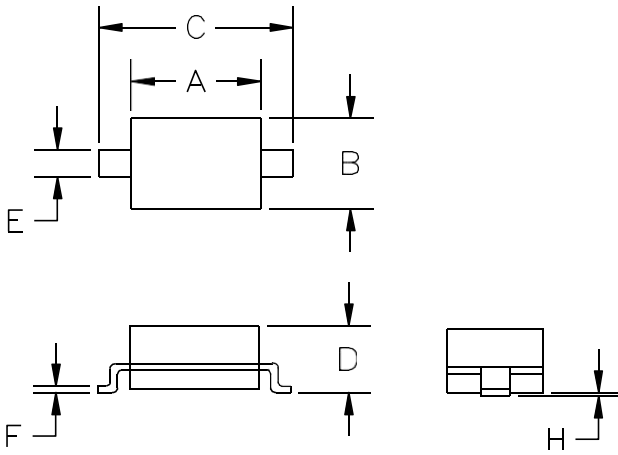
Absolute Maximum Ratings (TA=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20µs)	Ppk	200	W
Peak Pulse Current (8/20µs)	Ipp	2	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	VESD	±25 ±20	kV
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

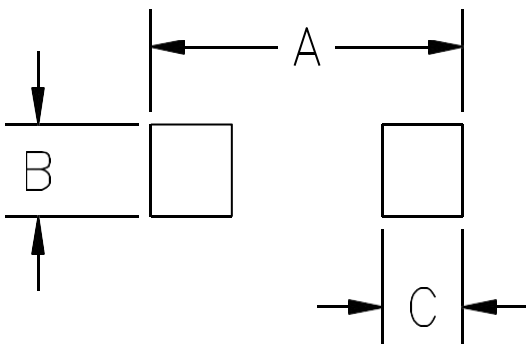
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			55	V	
Breakdown Voltage	VBR	60			V	IT = 1mA
Reverse Leakage Current	IR			0.2	µA	VRWM = 60V
Clamping Voltage	VC			80	V	I _{PP} = 1A (8 x 20µs pulse)
	VC			90	V	I _{PP} = 2A (8 x 20µs pulse)
Junction Capacitance	CJ			25	pF	VR = 0V, f = 1MHz

SOD-323 Package Outline Drawing



SYM	DIMENSIO			
	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.50	1.80	0.060	0.071
B	1.20	1.40	0.045	0.054
C	2.30	2.70	0.090	0.107
D	-	1.10	-	0.043
E	0.30	0.40	0.012	0.016
F	0.10	0.25	0.004	0.010
H	-	0.10	-	0.004

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
A	3.15	0.120
B	0.80	0.031
C	0.80	0.031