



1-Line Low Capacitance Bi-directional TVS Diode

Features

• 450W peak pulse power (8/20µs)

• Ultra low capacitance: 0.6pF typical

• Ultra low leakage: nA level

Low operating voltage: 5V

Low clamping voltage

• Protects one power line or data line

• Complies with following standards:

- IEC 61000-4-2 (ESD) immunity test

Air discharge: ±30kV Contact discharge: ±30kV

- IEC61000-4-4 (EFT) 80A (5/50ns)

- IEC61000-4-5 (Lightning) 18A (8/20 μs)

• RoHS Compliant

Applications

- USB Ports
- SIM Ports
- Smart Phones
- Wireless Systems
- Set-top box and digital TV
- Digital video interface (DVI)
- Ethernet 10/100/1000 Base T

Mechanical Characteristics

• Package: SOD-323

Lead Finish: Matte Tin

Case Material: "Green" Molding Compound.

UL Flammability Classification Rating 94V-0

Moisture Sensitivity: Level 3 per J-STD-020

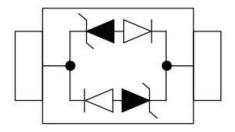
• Terminal Connections: See Diagram Below

Marking Information: See Below

Dimensions SOD-323



Pin Configuration



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

Parameter	Symbol	Value	Unit	
Peak Pulse Power (8/20µs)	Ррр	350	W	
ESD per IEC 61000-4-2 (Air)	- V _{ESD}	± 30	Kv	
ESD per IEC 61000-4-2 (Contact)	A E2D	± 30	IXV	
Operating Temperature Range	TJ	-55 to +125	$^{\circ}$	
Storage Temperature Range	Тѕтл	-55 to +150	$^{\circ}$	

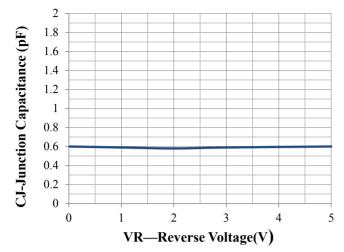


Electrical Characteristics (TA=25°C unless otherwise specified)

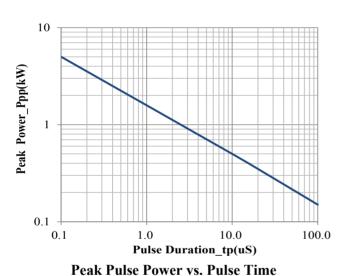
Part Number	Device Marking	V _{RWM} (V)	V _{BR} (V)	I⊤ (mA)	V _c @1A	(Max)	(@A)	I _R μΑ (Max)	C (Pf) (Typ.)
PJGBLC05C	AC	5	6	1	10	20	18	0.2	0.6



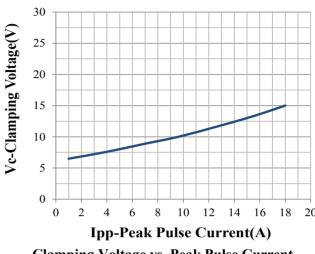
Typical Performance Characteristics (TA=25°C unless otherwise Specified)

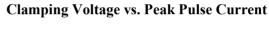


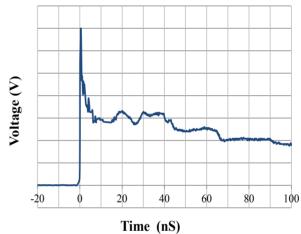
Junction Capacitance vs. Reverse Voltage



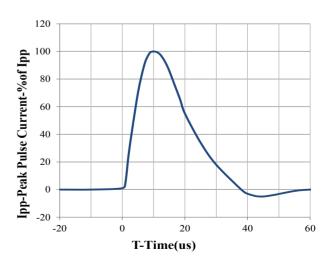
120 100 % of Rated Power 80 40 20 0 50 100 0 25 75 125 150 Ambient Temperature_Ta(℃) **Power Derating Curve**







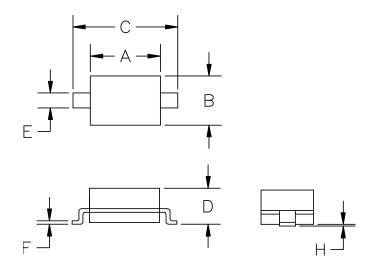
IEC61000-4-2 Pulse Waveform



8 X 20us Pulse Waveform

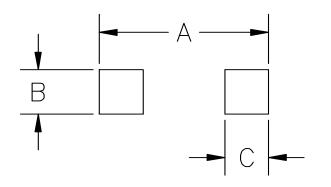


SOD-323 Package Outline & Dimensions



	DIMENSIONS				
SYM	MILLIMETERS		INCHES		
J	MIN	MAX	MIN	MAX	
Α	1.50	1.80	0.060	0.071	
В	1.20	1.40	0.045	0.054	
С	2.30	2.80	0.090	0.107	
D	ı	1.10	-	0.043	
Е	0.30	0.40	0.012	0.016	
F	0.10	0.25	0.004	0.010	
Н	-	0.10	-	0.004	

Suggested Land Pattern



SYM	DIMENSIONS			
	MILLIMETERS	INCHES		
Α	3.15	0.120		
В	0.80	0.031		
С	0.80	0.031		

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