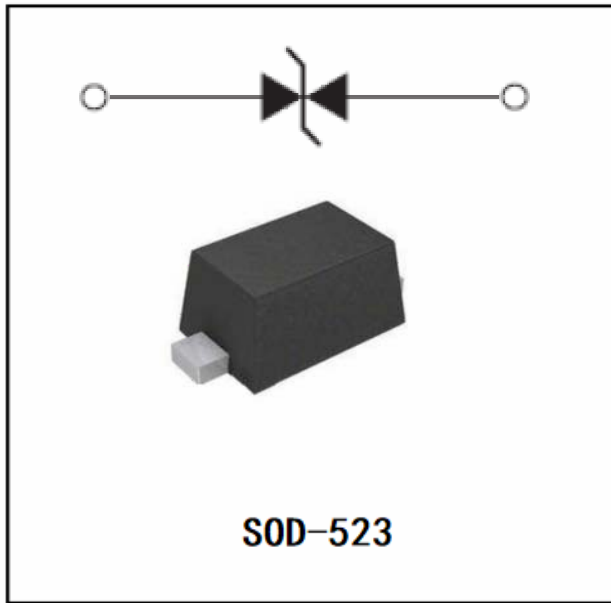


1-Line Ultra Low Capacitance Bi-directional TVS Diode

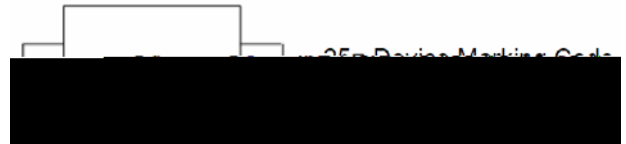


Features

- Ultra low capacitance: 0.3pF typical
- Ultra low leakage: nA level
- Operating voltage: 5.0V
- Low clamping voltage
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 25\text{Kv}$
 - Contact discharge: $\pm 22\text{kV}$
 - IEC61000-4-5 (Lightning) 30A (8/20 μs)
- RoHS Compliant

Mechanical Characteristics

- Package: SOD-523



Peak Pulse Current (8/20 μs)	I_{PP}	4	A
ESD t	!	temperature Range	Tstg
			-55 to +150

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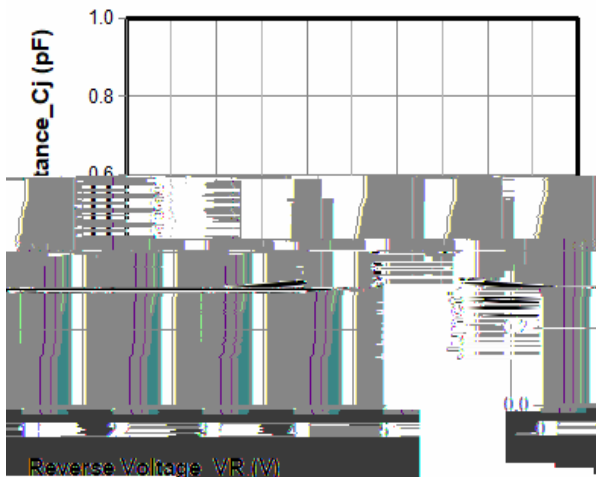
■Electrical Characteristics $T_a=25^\circ\text{C}$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	CONDITIONS	MIN	TYP	MAX
Reverse Working Voltage	V_{RWM}	V				5
Breakdown Voltage	V_{BR}	V	$I_T = 1\text{mA}$	6.5		9.5
Reverse Leakage Current	I_R	μA	$V_{RWM} = 5\text{V}$		0.02	0.2
Clamping Voltage	V_C	V	$I_{PP} = 1\text{A}$ (8/20 μs pulse)			12
Clamping Voltage	V_C	V	$I_{PP} = 4\text{A}$ (8/20 μs pulse)			25
Junction Capacitance	C_J	pF	$V_R = 0\text{V}$, $f = 1\text{MHz}$		0.3	0.5

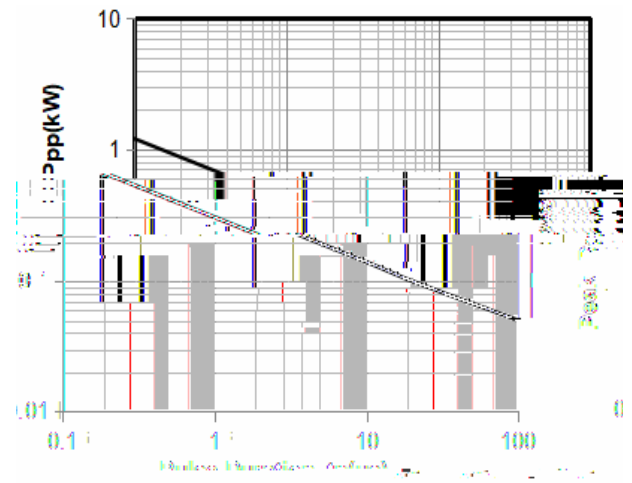


ESDSL5V0D5B

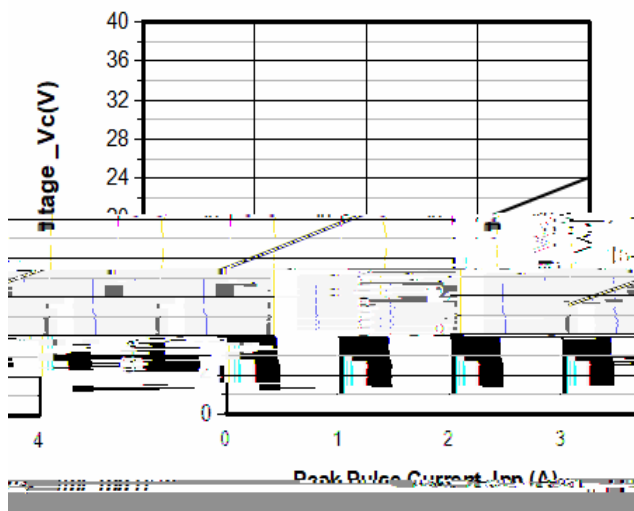
■ Characteristics (Typical)



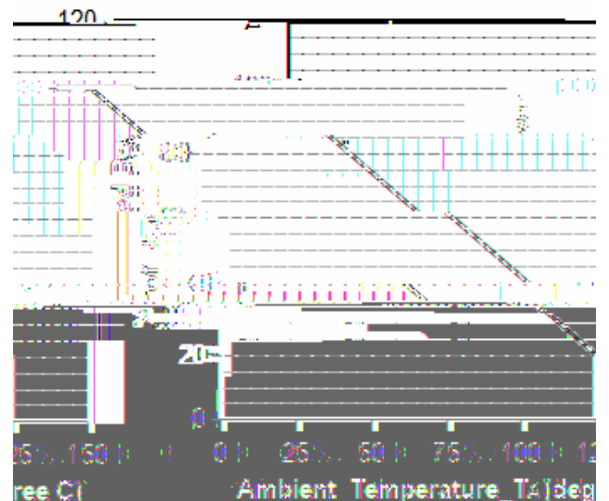
Junction Capacitance vs. Reverse Voltage



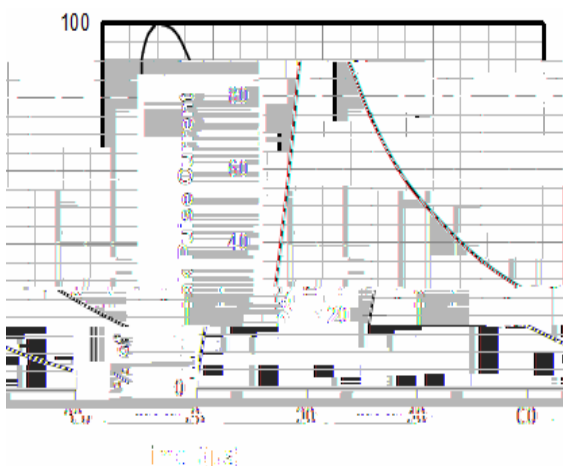
Peak Pulse Power vs. Pulse Time



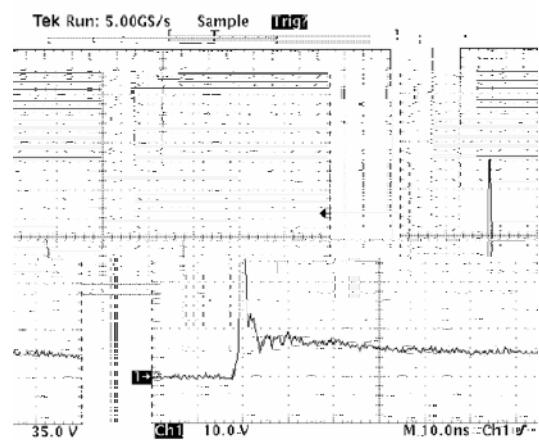
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



8/20µs Pulse Waveform

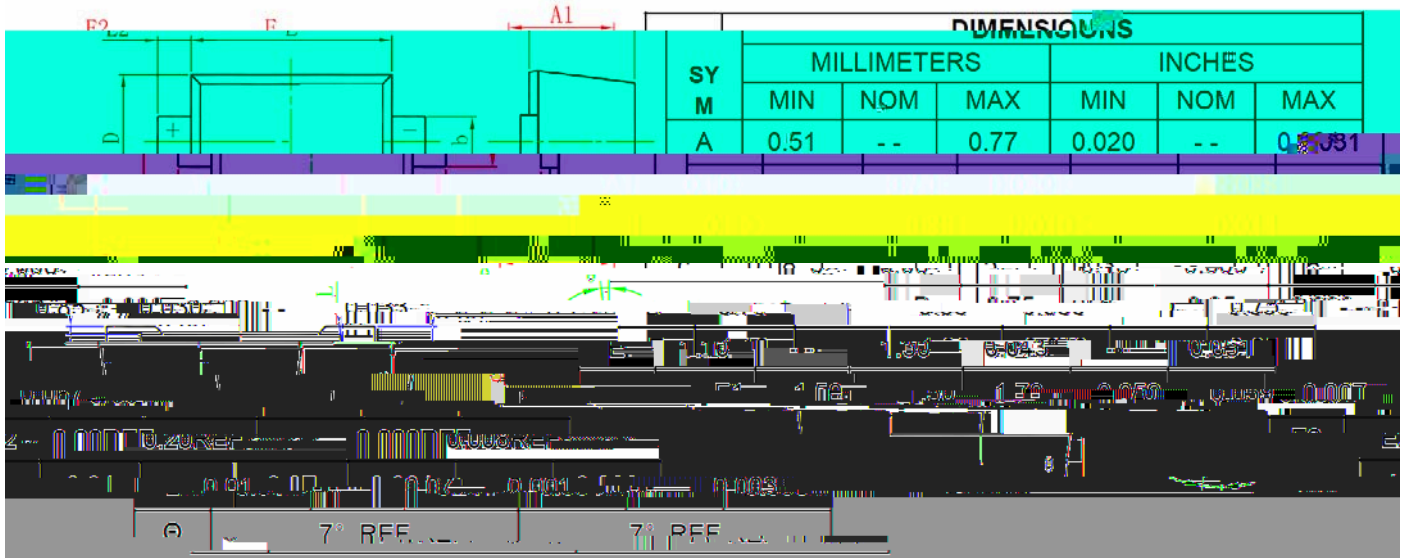


Note Data is taken with a 10x attenuator
ESD Clamping Voltage
+8 kV Contact per IEC61000-4-2

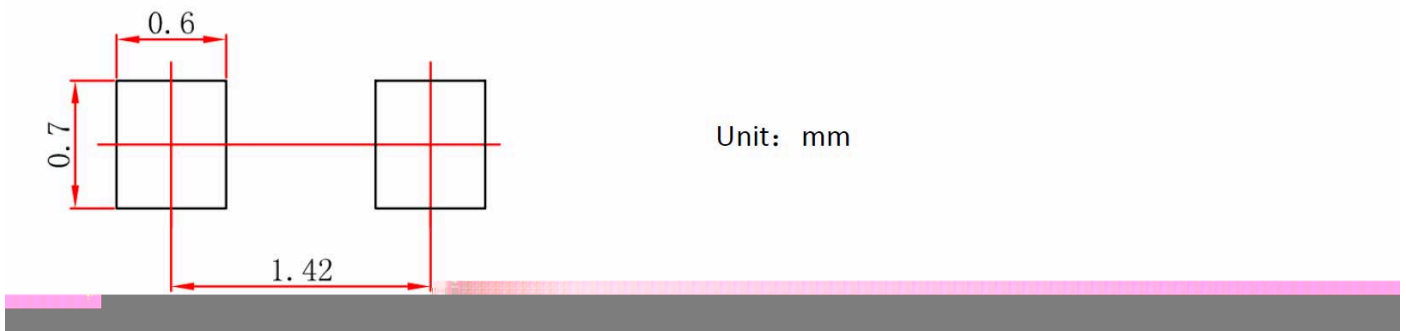


ESDSL5C5V0D5B

■ Outline Dimensions



■ Soldering Footprint





Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments).