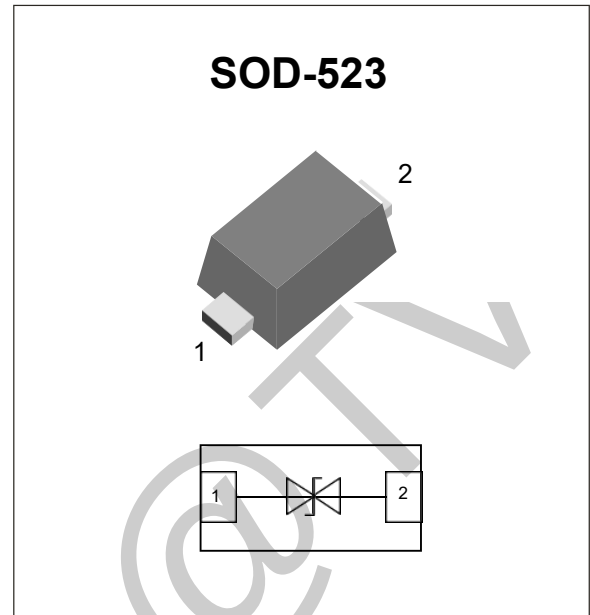


Features

- Protects one data or power line
- Ultra low leakage: nA level
- Operating voltage: 3.3V
- Low clamping voltage
- IEC 61000-4-2 ESD: Air $\pm 30\text{kV}$, Contact $\pm 30\text{kV}$
- RoHS Compliant

Mechanical Data

- Package: SOD-523
- Lead Finish: Matte Tin
- Case Material: Green Molding Compound



Applications

- Cellular Handsets and Accessories
- Notebooks and Handhelds
- Portable Instrumentation, Digital Cameras
- Audio Players, Keypads, LCD Displays

Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
DCE3V3D5BQ	3Y	SOD-523	Tape and reel	10000pcs / reel	EIA STD RS-481

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

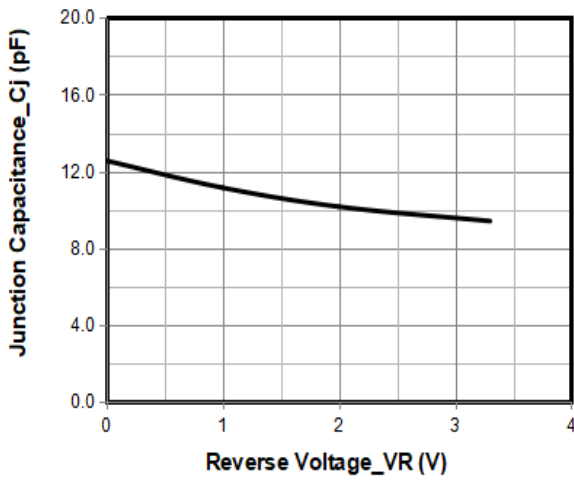
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu\text{s}$)	P_{PP}	100	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	$\pm 30/\pm 30$	kV
Peak Pulse Current ($T_P = 8/20\mu\text{s}$)	I_{PP}	10	A
Junction Temperature	T_J	-55 to +125	°C
Operation temperature	T_{OP}	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

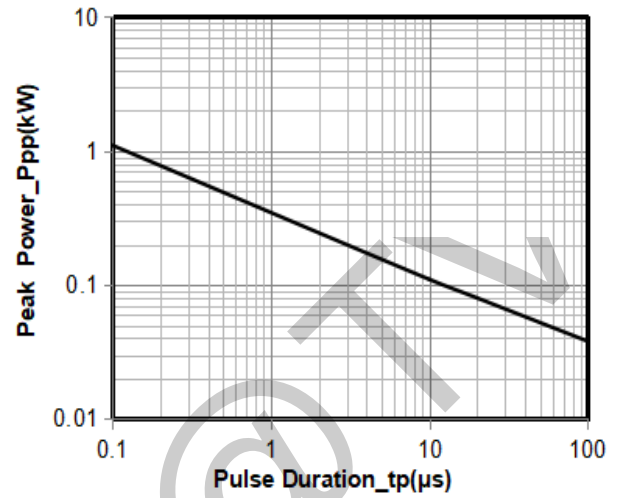
(T_A = 25 °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V _{RWM}		-	-	3.3	V
Holding Voltage	V _{BR}	I _T = 1mA	3.5	-	-	V
Reverse Leakage Current	I _R	V _{RWM} = 3.3V	-	-	0.2	uA
Clamping Voltage	V _C	I _{PP} = 1A, t _p = 8/20μs	-	-	6	V
Clamping Voltage	V _C	I _{PP} = 10A, t _p = 8/20μs	-	-	10	V
Junction Capacitance	C _J	V _R = 0V, f = 1MHz	-	10	20	pF

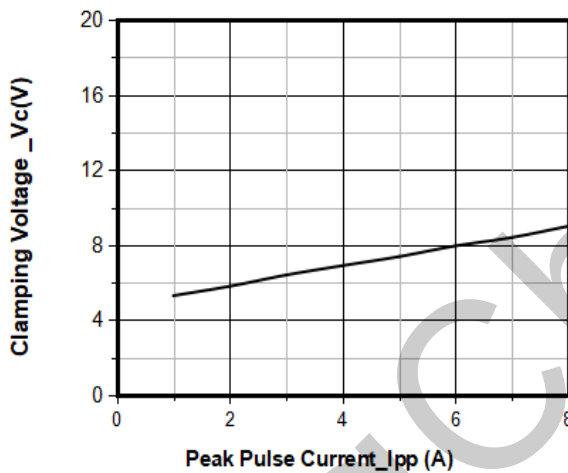
Typical Performance Characteristics (TA=25°C unless otherwise Specified)



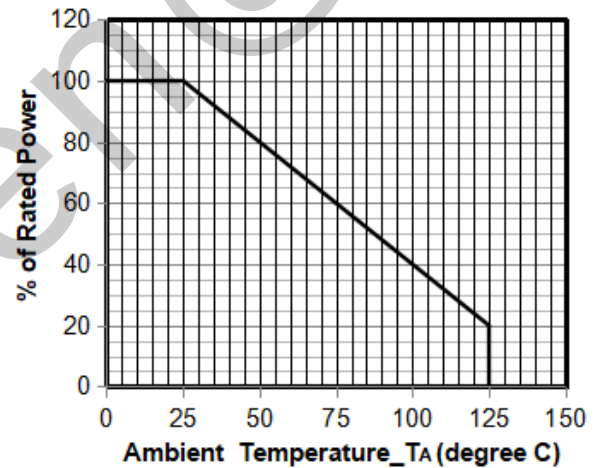
Junction Capacitance vs. Reverse Voltage



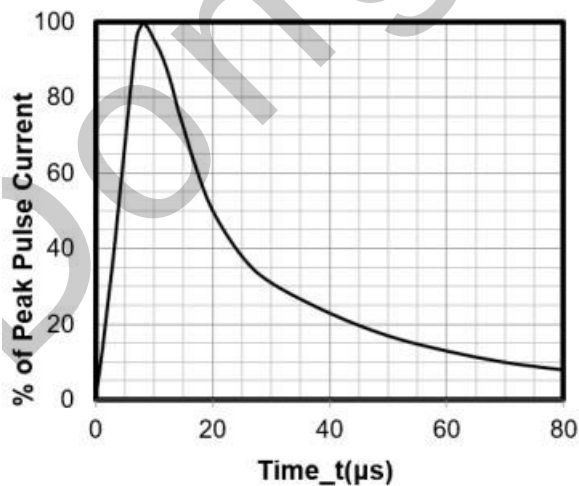
Peak Pulse Power vs. Pulse Time



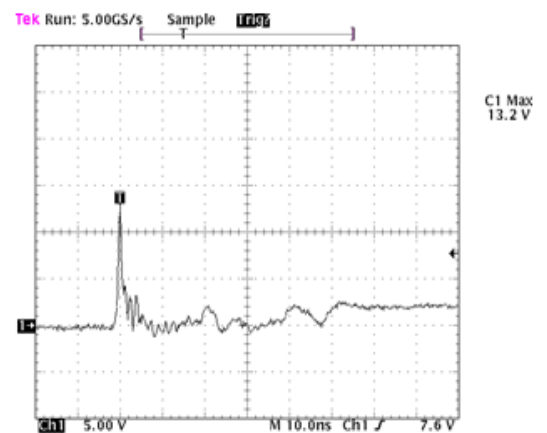
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



8 X 20 μ s Pulse Waveform

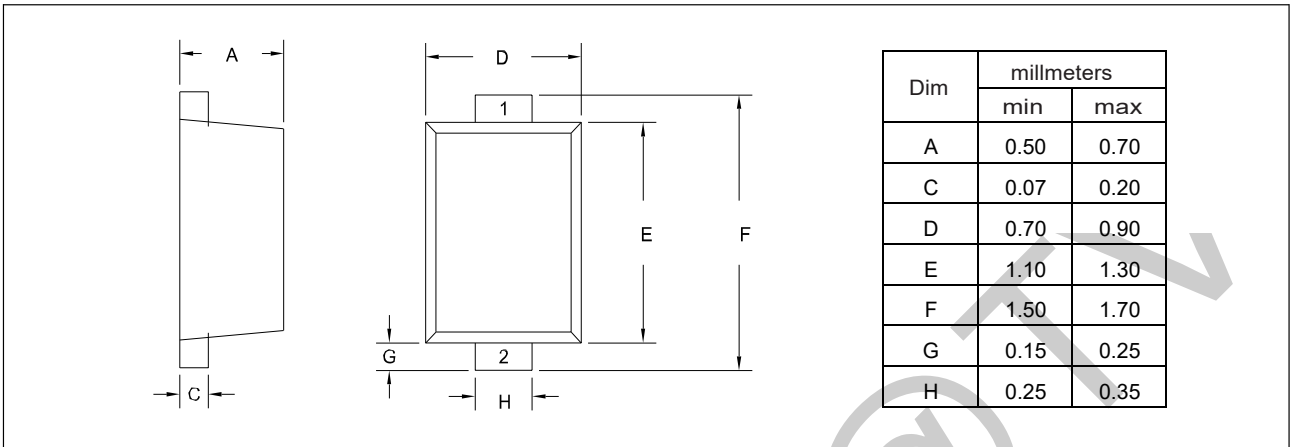


Note: Data is taken with a 10x attenuator

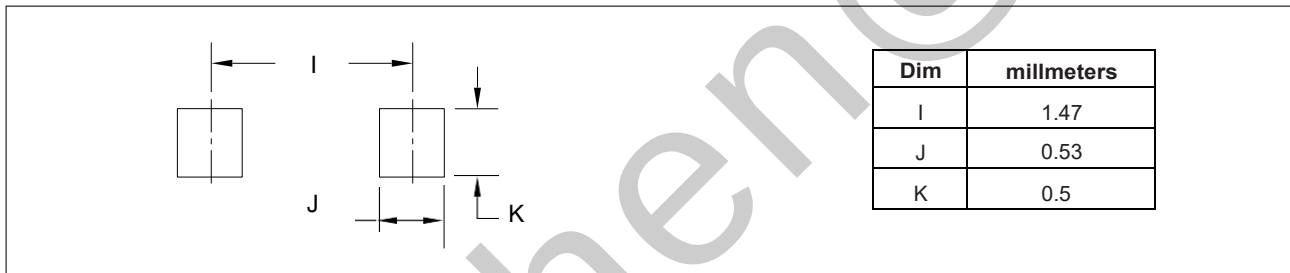
ESD Clamping Voltage

8 kV Contact per IEC61000-4-2

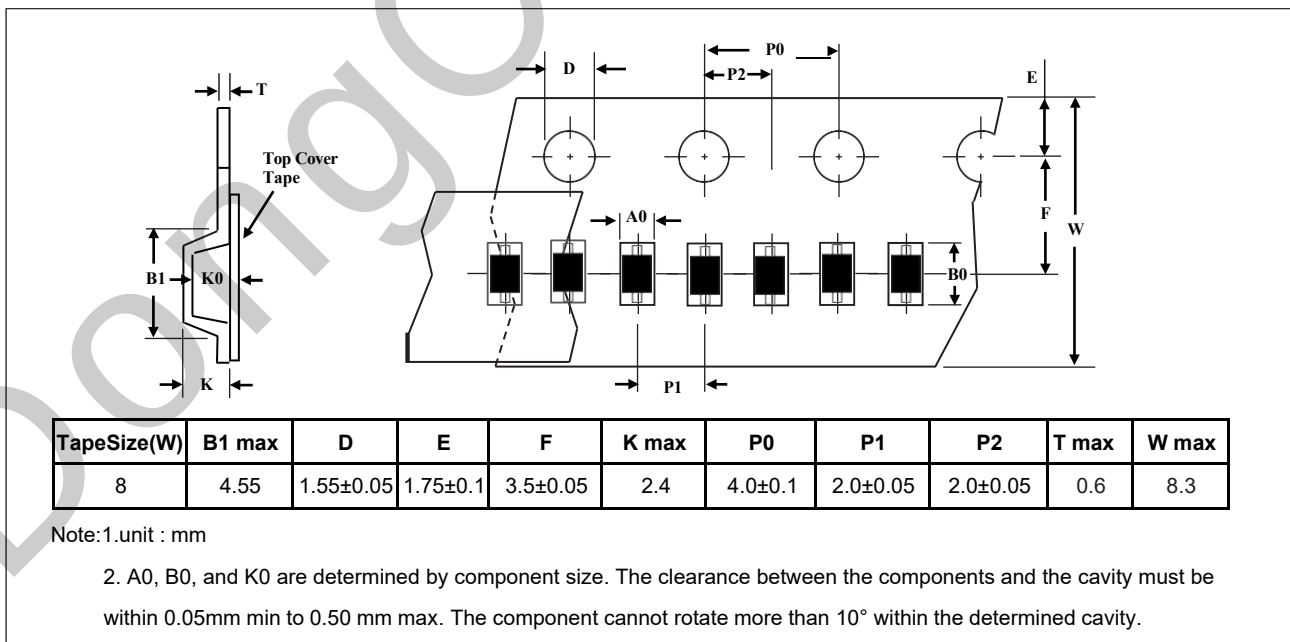
Package Dimensions



Pad Dimensions



Package Dimensions



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