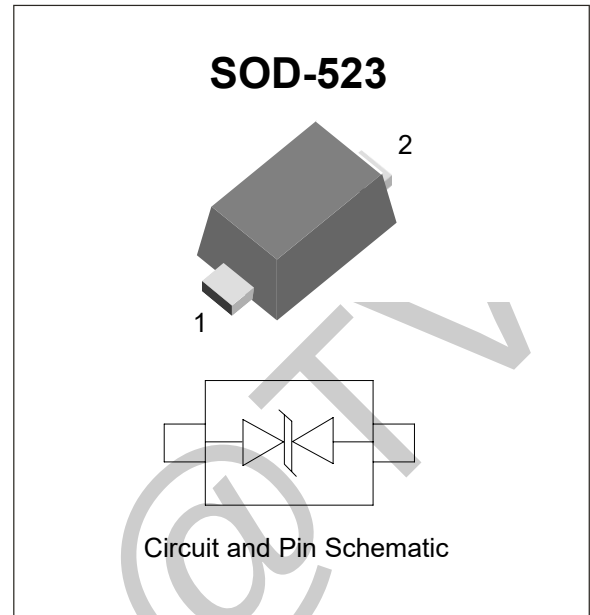


Features

- Protects one data or power line
- Ultra low leakage: nA level
- Operating voltage: 24V
- Low clamping voltage
- IEC 61000-4-2 (ESD): Air $\pm 30\text{kV}$, Contact $\pm 30\text{kV}$
- IEC 61000-4-5 (Lightning): 5A (8/20 μs)
- ROHS Compliant

Mechanical Data

- Package: SOD-523
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound
- Moisture Sensitivity: Level 3 per J-STD-020
- Marking: 24D (Device Marking Code)



Applications

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

Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
DCE2421D5	24D	SOD-523	Tape and reel	3000pcs / reel	EIA STD RS-481

Absolute Maximum Ratings

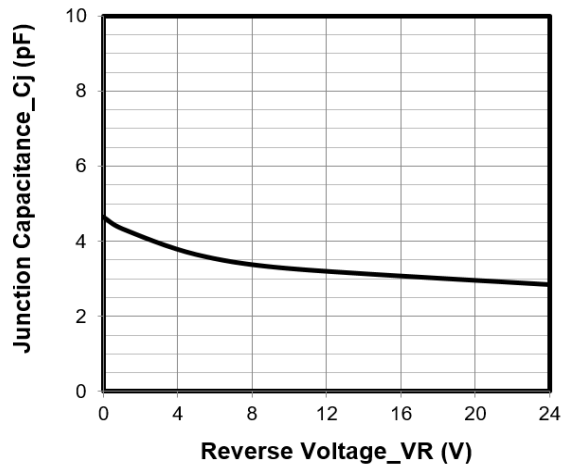
Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu\text{s}$)	P_{PP}	180	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}	5	A
Junction Temperature	T_J	-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}		-	24	-	V
Holding Voltage	V _{BR}	I _T = 2μA	25	-	-	V
Reverse Leakage Current	I _R	V _{RWM} = 24V	-	-	0.2	uA
Clamping Voltage	V _C	I _{PP} = 1A, t _p = 8/20μs	-	-	32	V
Clamping Voltage	V _C	I _{PP} = 5A, t _p = 8/20μs	-	-	36	V
Junction Capacitance	C _J	V _R = 0V, f = 1MHz	-	-	5	pF

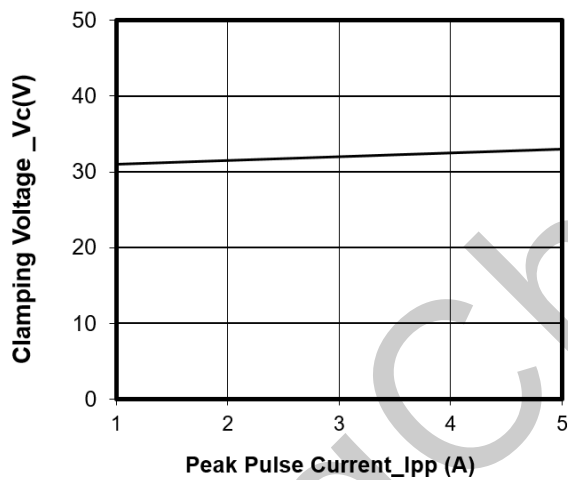
Typical Performance Characteristics (TA=25°C unless otherwise Specified)



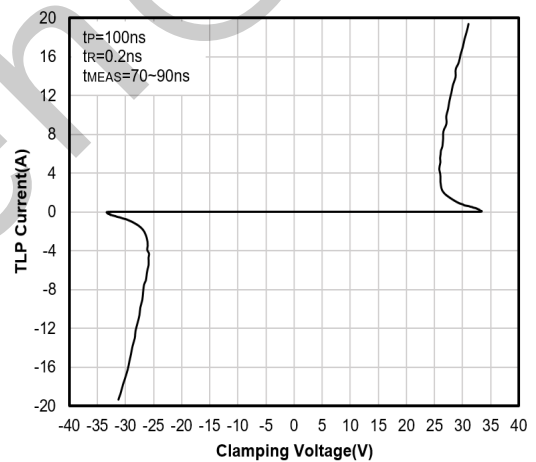
Junction Capacitance vs. Reverse Voltage



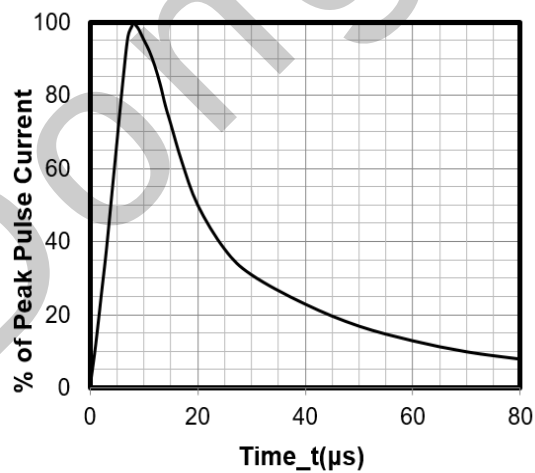
Peak Pulse Power vs. Pulse Time



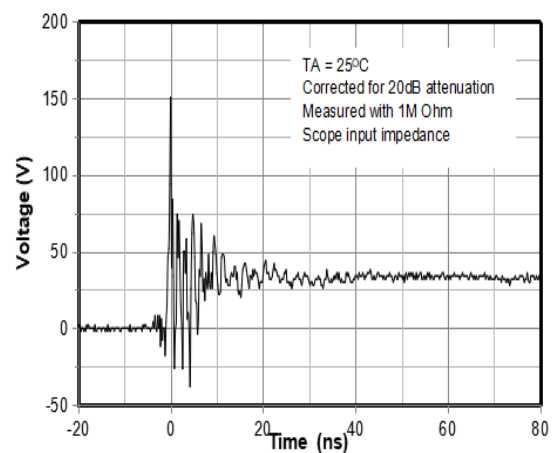
Clamping Voltage vs. Peak Pulse Current



TLP Curve

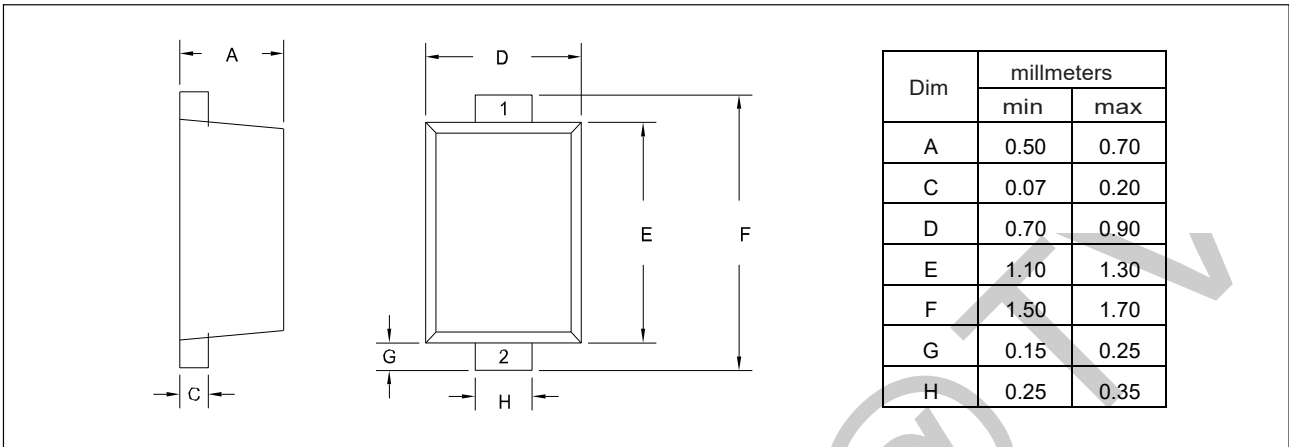


8 X 20μs Pulse Waveform

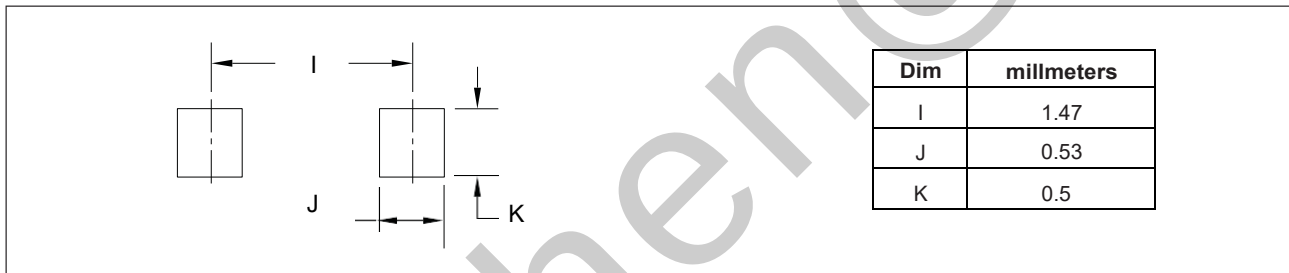


ESD Clamping Voltage
8 kV Contact per IEC61000-4-2

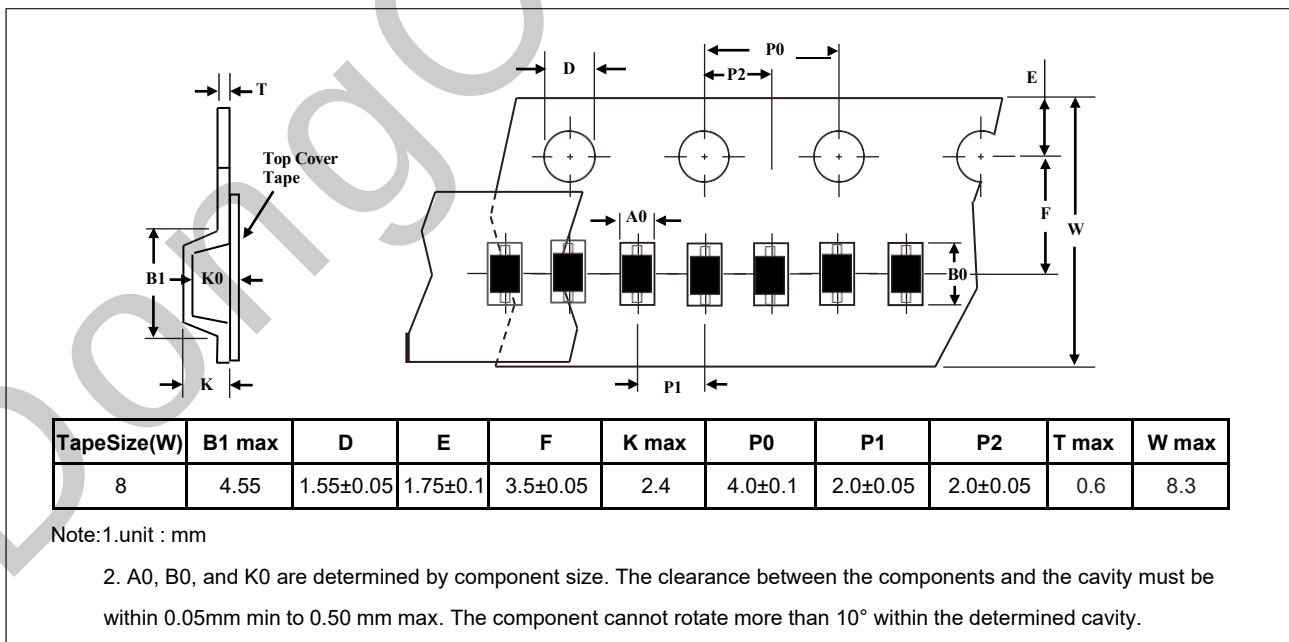
Package Dimensions



Pad Dimensions



Package Dimensions



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Head Office

Contact Information:

DongChen Electronics Co.,Ltd.

Address: 2F., No.407, Sec. 2, Longgang Rd.,Zhongli Dist.,
Taoyuan City 32097, Taiwan (R.O.C.)

Tel: 03-284-1808

Fax: 03-284-1404

Mail:dc@dongchen.com.tw

Web:www.dongchen.com.tw