

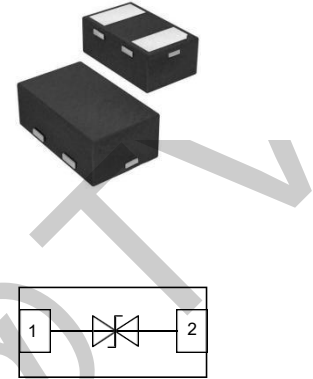
Features

- Ultra small package: 1.0 x 0.6 x 0.5mm
- Ultra low capacitance: 0.26pF typical
- Ultra low leakage: nA level
- Operating voltage: 5V
- Low clamping voltage
- 2-pin leadless package
- Complies with IEC 61000-4-2 (ESD): Air ± 25 kV, Contact ± 20 kV
- IEC 61000-4-5 (Lightning): 2.8A (8/20 μ s)
- RoHS Compliant

Mechanical Data

- Package: DFN1006-2 (1.0 x 0.6 x 0.5mm)
- Case Material: "Green" Molding Compound
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below

DFN1006-2L



Applications

- Cellular Handsets and Accessories
- Display Ports
- MDDI Ports
- USB Ports
- Digital Visual Interface (DVI)
- PCI Express and Serial SATA Ports

Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
DCE0510D2LCL	6U	DFN1006-2	Tape and reel	10000pcs / reel	EIA STD RS-481

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

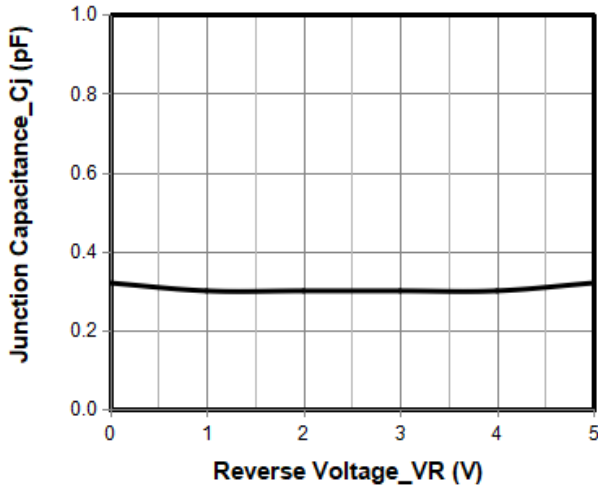
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu$ s)	P_{PP}	45	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	$\pm 20/\pm 25$	kV
Peak Pulse Current ($T_P = 8/20\mu$ s)	I_{PP}	2.8	A
Junction Temperature	T_J	-55 to +125	°C
Operation temperature	T_{OP}	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

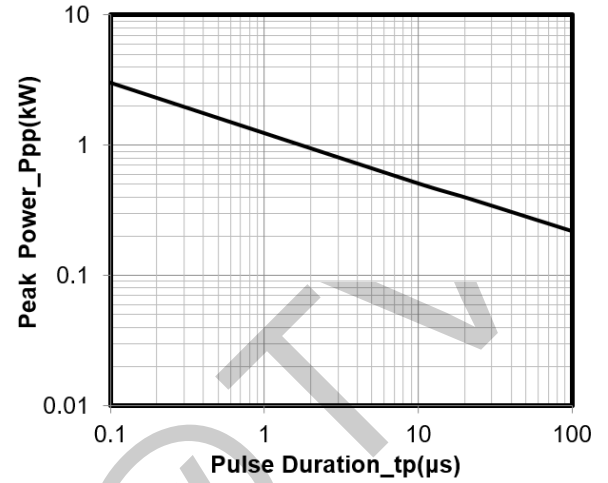
(T_A = 25 °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V _{RWM}		-	-	5	V
Holding Voltage	V _{BR}	I _T = 1mA	6.5	-	9.5	V
Reverse Leakage Current	I _R	V _{RWM} = 5V	-	-	0.2	uA
Clamping Voltage	V _C	I _{PP} = 1A, t _p = 8/20μs	-	-	11	V
Clamping Voltage	V _C	I _{PP} = 2.8A, t _p = 8/20μs	-	-	16	V
Junction Capacitance	C _J	V _R = 0V, f = 1MHz	-	0.26	0.5	pF

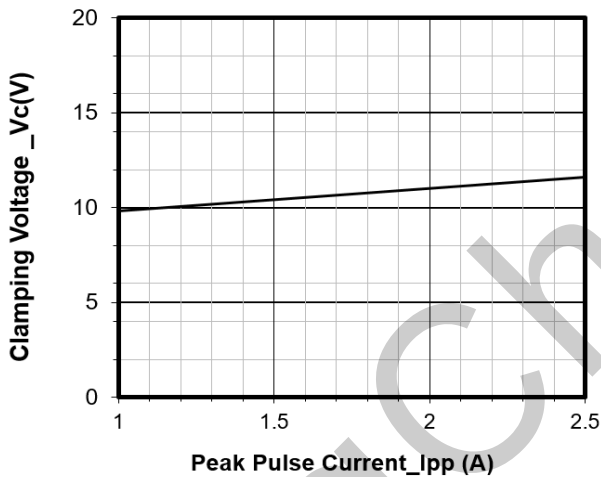
Typical Performance Characteristics (T_A=25°C unless otherwise Specified)



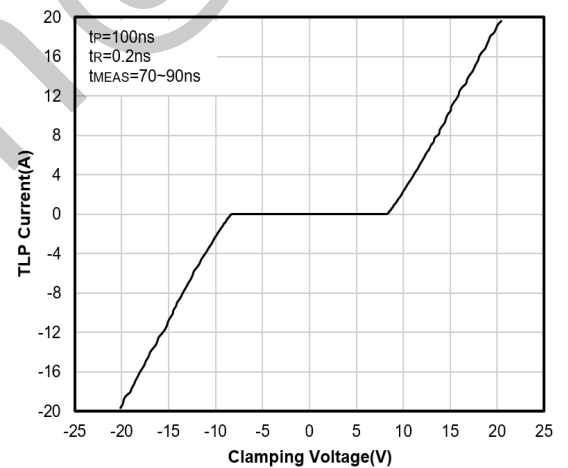
Junction Capacitance vs. Reverse Voltage



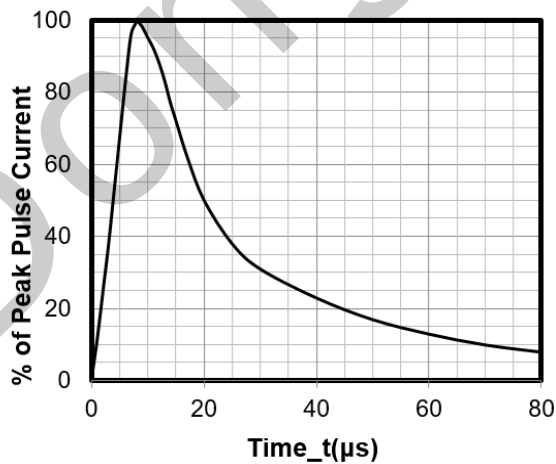
Peak Pulse Power vs. Pulse Time



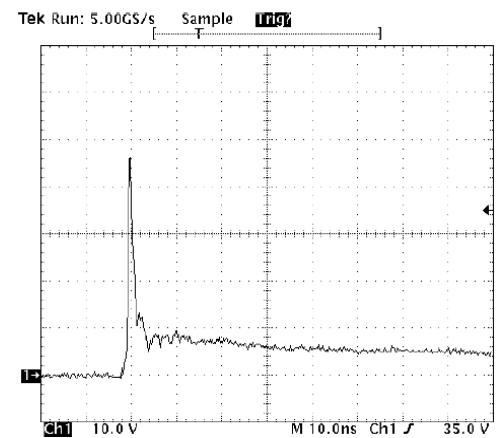
Clamping Voltage vs. Peak Pulse Current



TLP Curve



8 X 20μs Pulse Waveform

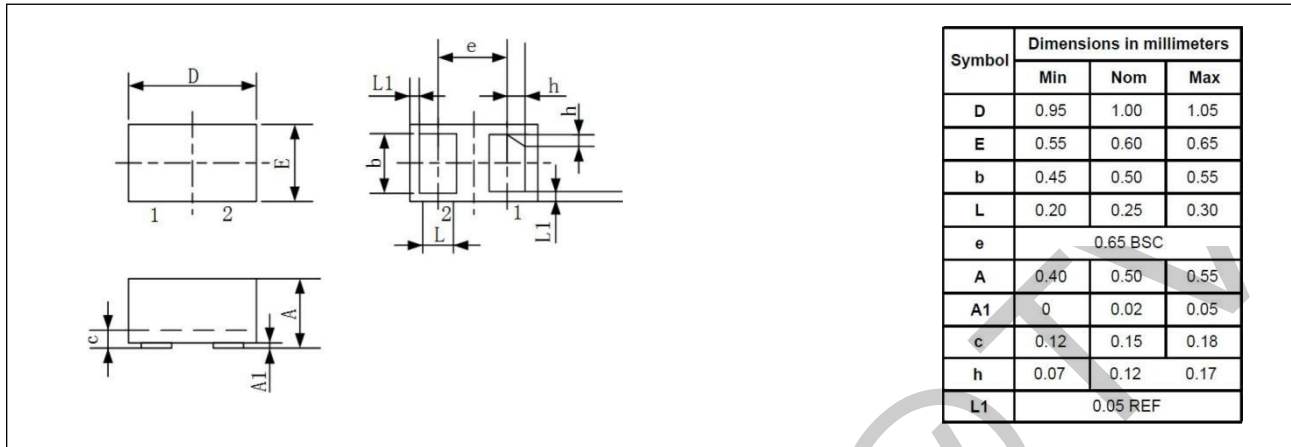


Note: Data is taken with a 10x attenuator

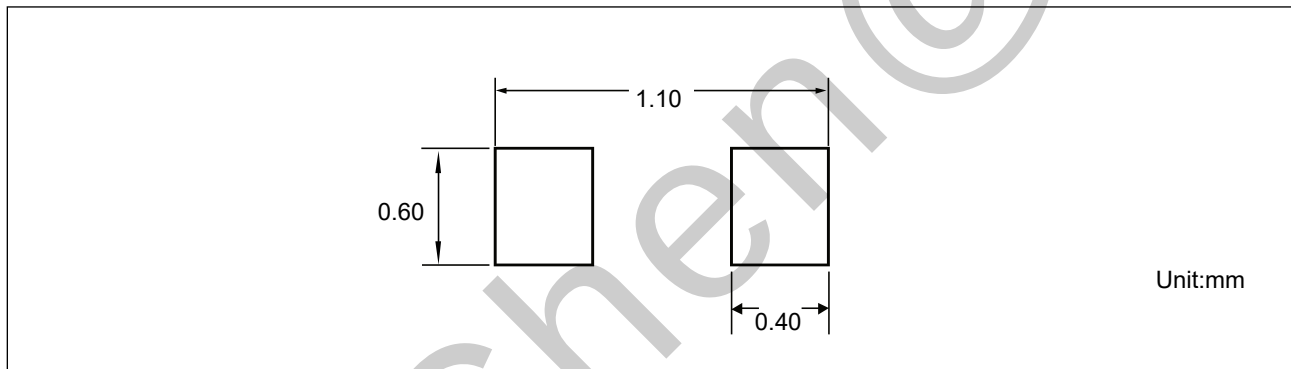
ESD Clamping Voltage

8 kV Contact per IEC61000-4-2

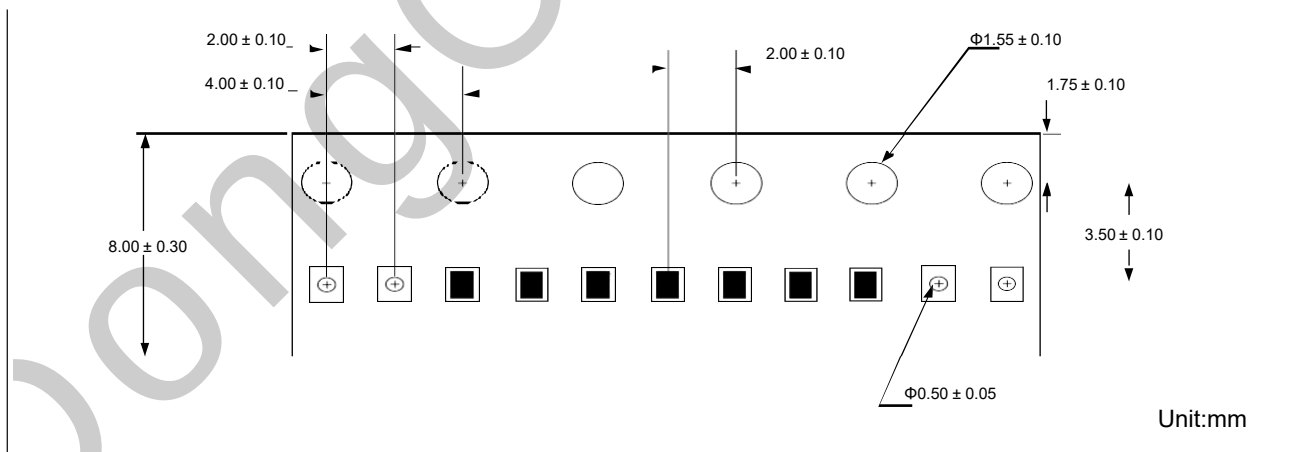
Package Dimensions



Pad Dimensions



Tape and Reel Specification



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