

Features

- Ultra low capacitance: 0.35pF typical
- Ultra low leakage: nA level
- Low operating voltage: 3.3V
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 20\text{kV}$
 - Contact discharge: $\pm 15\text{kV}$
 - IEC61000-4-5 (Lightning)4A (8/20 μs)
- RoHS Compliant
- Lead Finish: NiPdAu

Mechanical Characteristics

- Package: SOT23-3
- Lead Finish: Matte Tin
- Case Material: “Green” Molding Compound.
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below

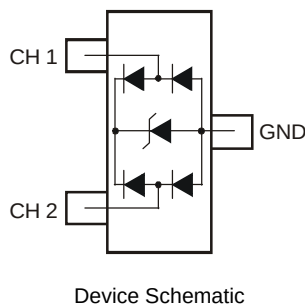
Applications

- ◆ Cellular Handsets and Accessories
- ◆ Notebooks and Handhelds
- ◆ Portable Instrumentation
- ◆ Set Top Box
- ◆ Industrial Controls

Ordering Information

Part Number	Qty per Reel	Reel Size
D1213A-02SOL-TP	3000	7"

Dimensions and Pin Configuration



Absolute Maximum Ratings (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{pk}	100	W
Peak Pulse Current (8/20μs)	I _{PP}	4	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{ESD}	± 20 ± 15	kV
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

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

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			3.3	V	
Breakdown Voltage	V _{BR}	6			V	I _T = 1mA
Reverse Leakage Current	I _R			1	μA	V _{RWM} = 3.3V
Forward Voltage	V _F		0.8	1.2	V	I _F = 10mA
Clamping Voltage	V _C			15	V	I _{PP} = 1A (8 x 20μs pulse)
Clamping Voltage	V _C			23	V	I _{PP} = 4A (8 x 20μs pulse)
Junction Capacitance	C _J			0.7	pF	V _R =0, f=1MHz, Pin 1 to Pin 3 or Pin 2 to Pin 3
Junction Capacitance	C _J		0.35		pF	V _R =0, f=1MHz, Pin 1 to Pin 2

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

Fig1. 8/20 μs Pulse Waveform

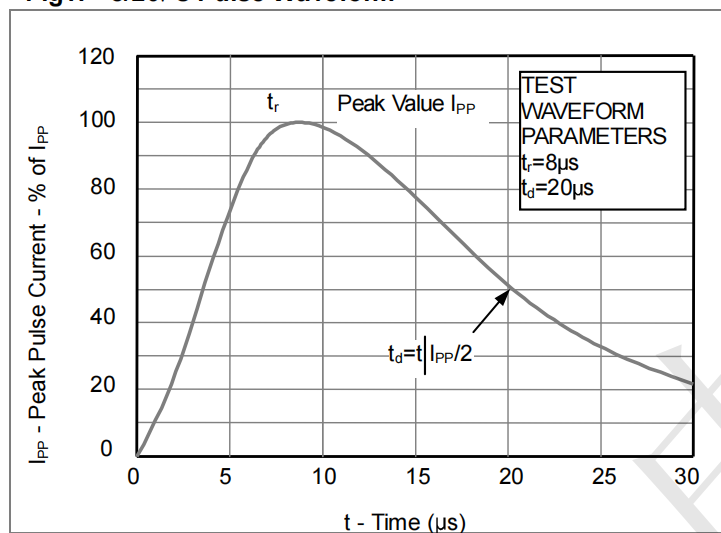


Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)

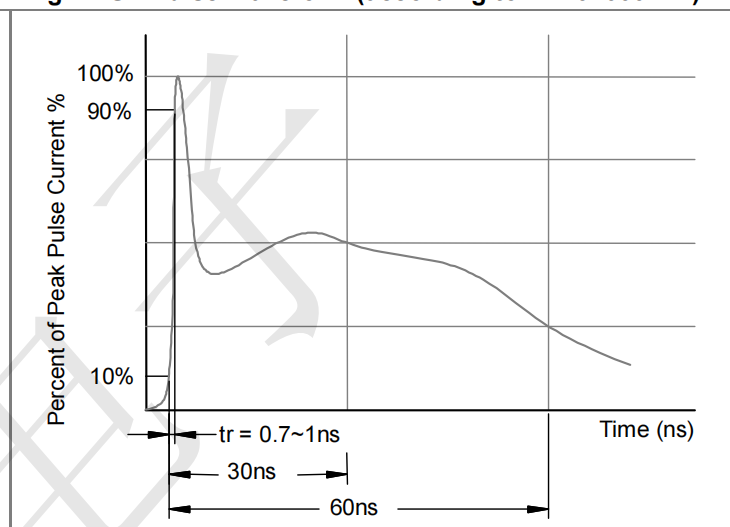
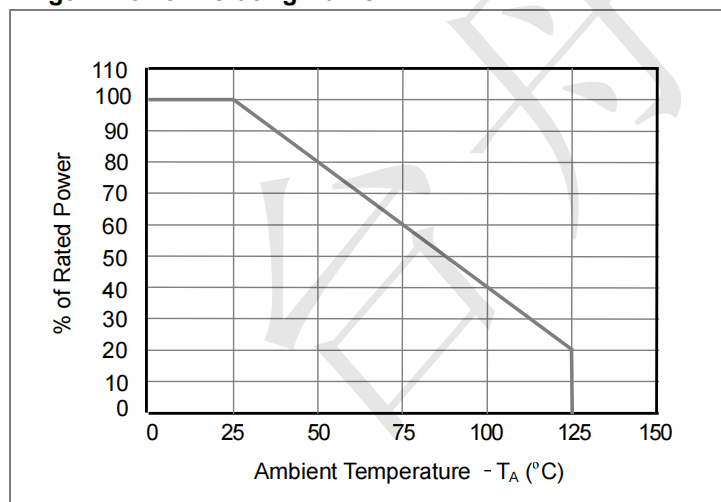
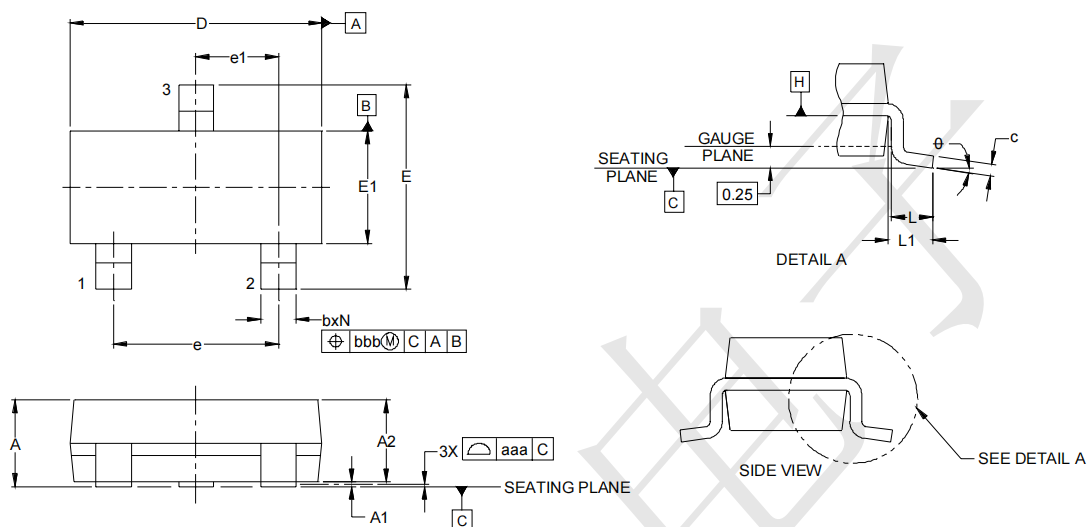


Fig3. Power Derating Curve



Outline Drawing - SOT23



Land Pattern - SOT23

