

## Features

- Ultra low capacitance: 15pF typical
- Ultra low leakage: nA level
- Low operating voltage:  $\pm 5V$
- Low clamping voltage
- 2-pin leadless package
- Complies with following standards:
  - – IEC 61000-4-2 (ESD) immunity test
    - Air discharge:  $\pm 30kV$
    - Contact discharge:  $\pm 30kV$
  - – IEC61000-4-5 (Lightning)8A (8/20 $\mu s$ )
- RoHS Compliant
- Lead Finish: NiPdAu

## Mechanical Characteristics

- ◆ Package: SOT23-5
- ◆ Lead Finish: Matte Tin
- ◆ Case Material: “Green” Molding Compound.
- ◆ UL Flammability Classification Rating 94V-0
- ◆ Moisture Sensitivity: Level 3 per J-STD-020

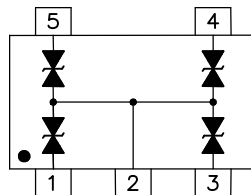
## Applications

- u Cell phone Handsets and Accessories
- u Microprocessor Based Equipment
- u Personal Digital Assistants (PDA's)
- u Notebooks, Desktops, and Servers
- u Portable Instrumentation
- u Set Top Box

## Ordering Information

Part Number	Qty per Reel	Reel Size
TPE4004BS5	3000	7"

## Dimensions and Pin Configuration



**Absolute Maximum Ratings** (Tamb=25°C unless otherwise specified)

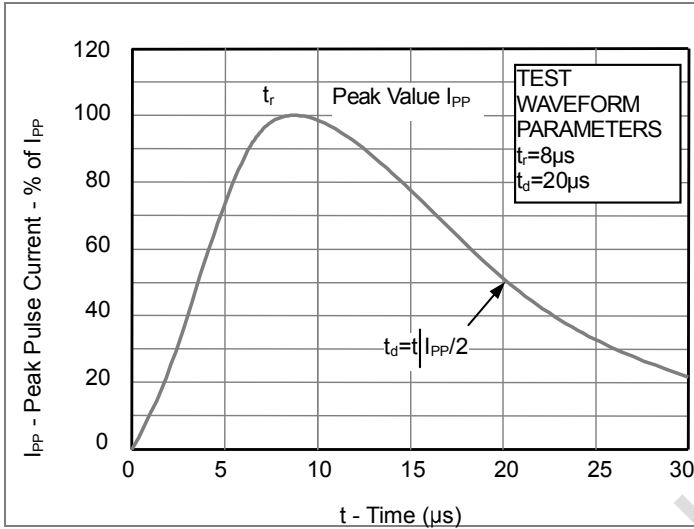
Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	Ppk	80	W
Peak Pulse Current (8/20μs)	Ipp	8	A
ESD per IEC 61000-4-2 (Air)	VESD	±25	kV
ESD per IEC 61000-4-2 (Contact)		±25	
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

**Electrical Characteristics** (TA=25°C unless otherwise specified)

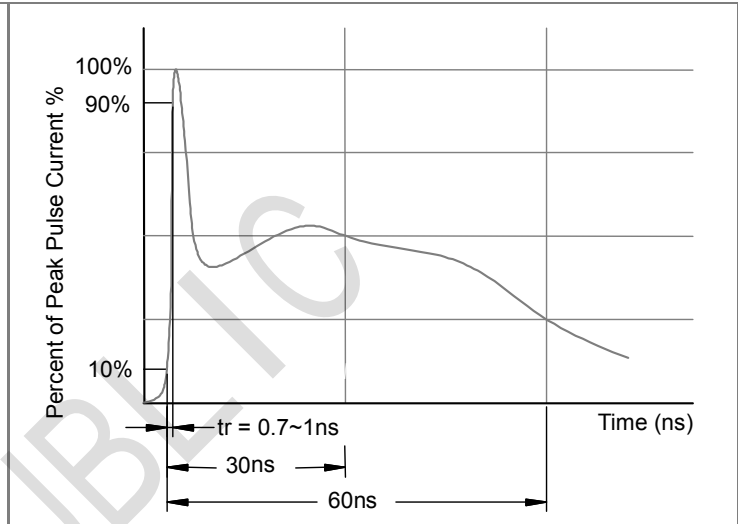
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			5	V	
Breakdown Voltage	VBR	5.6		8.4	V	IT = 1mA
Reverse Leakage Current	IR			0.08	uA	VRWM = 5V
Clamping Voltage	VC			6	V	Ipp=1A(8x 20us pulse)
Clamping Voltage	VC			10	V	Ipp=8A(8x 20us pulse)
Junction Capacitance	CJ		15		pF	VR = 0V, f = 1MHz IO to IO

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

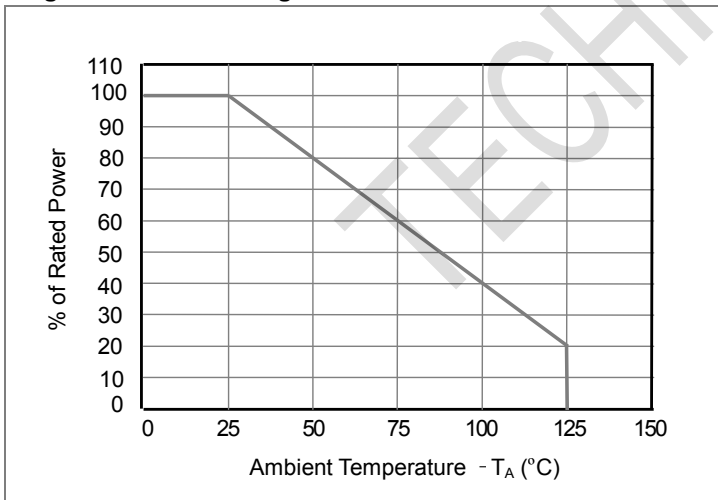
**Fig1. 8/20 $\mu\text{s}$  Pulse Waveform**



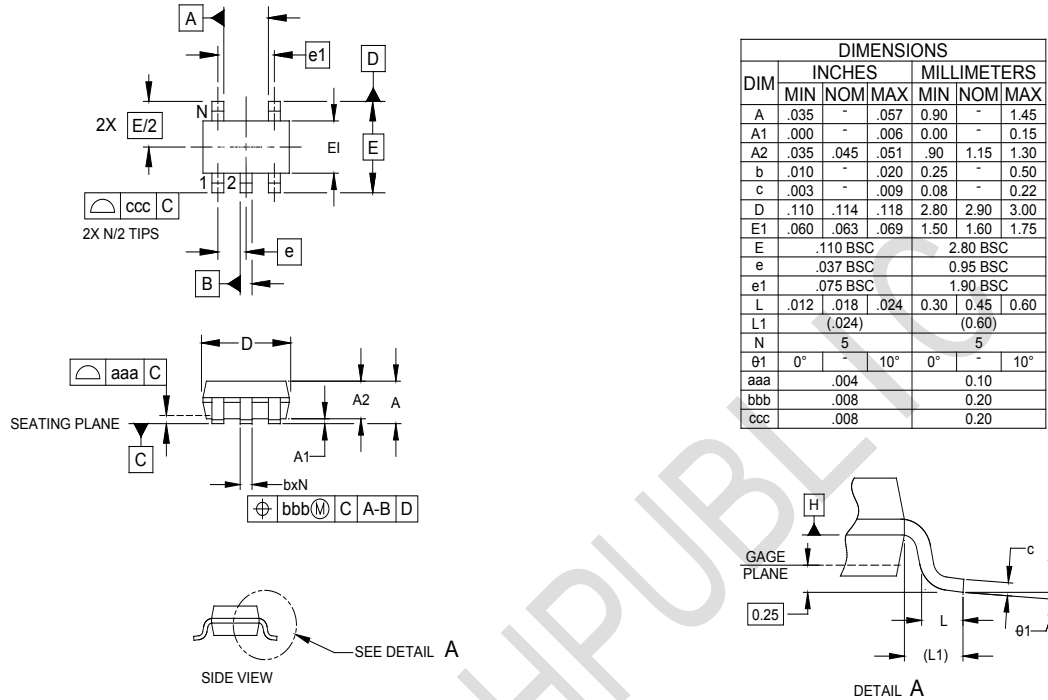
**Fig2. ESD Pulse Waveform (according to IEC 61000-4-2)**



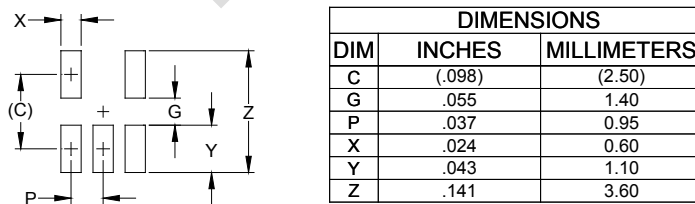
**Fig3. Power Derating Curve**



**SOT23-5 Package Outline Drawing**



**Suggested Land Pattern**





## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [ESD Suppressors / TVS Diodes](#) category:*

*Click to view products by [TECH PUBLIC](#) manufacturer:*

Other Similar products are found below :

[60KS200C](#) [D18V0L1B2LP-7B](#) [D5V0F4U5P5-7](#) [DESD5V0U1BB-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE39CA-TP](#) [P6KE8.2A](#)  
[SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ33CATR](#) [SMBJ8.0A](#) [ESD101-B1-02ELS E6327](#) [ESD105-B1-02EL E6327](#) [ESD112-B1-02EL E6327](#) [ESD119B1W01005E6327XTSA1](#) [ESD5V0L1B02VH6327XTSA1](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-HF](#)  
[3.0SMCJ33CA-F](#) [3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#) [DESD5V0U1BL-7B](#) [DRTR5V0U4SL-7](#)  
[SCM1293A-04SO](#) [ESD200-B1-CSP0201 E6327](#) [SM12-7](#) [SMF8.0A-TP](#) [SMLJ45CA-TP](#) [SMQA1000T1G](#) [CEN955 W/DATA](#) [82350120560](#)  
[VESD12A1A-HD1-GS08](#) [CPDUR5V0R-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#) [CPDQC5V0-HF](#) [IP4042CX5/LF,135](#) [D1213A-01LP4-7B](#) [D1213A-02WL-7](#) [1SMB33CAT3G-XYZ](#) [MMAD1108/TR13](#) [5KP100A](#) [5KP15A](#)