

## CPDU3V3UP-HF

### RoHS Device

### Halogen Free



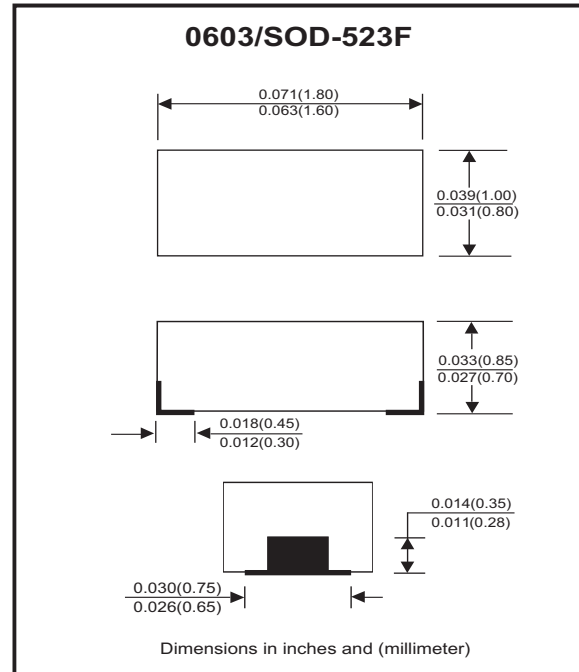
### Features

- Working voltage: 3.3V
- Low leakage current.
- Low operating and clamping voltages.

### Mechanical data

- Case: 0603/SOD-523F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Marking code: E3V3
- Mounting position: Any
- Weight: 0.003 gram(approx.).

### Circuit Diagram



### Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak pulse power ( tp = 8/20 us)	PPP	40	W
Peak pulse current ( tp = 8/20 us)	I <sub>PP</sub>	5	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	V <sub>ESD</sub>	±20 ±15	kV
Operating temperature	T <sub>J</sub>	-55 to +125	°C
Storage temperature	T <sub>STG</sub>	-55 to +125	°C

### Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		V <sub>RWM</sub>			3.3	V
Punch-through voltage	I <sub>PT</sub> = 2uA	V <sub>PT</sub>	3.5			V
Snap-back voltage	I <sub>SB</sub> = 50mA	V <sub>SB</sub>	2.8			V
Reverse leakage current	V <sub>RWM</sub> = 3.3V	I <sub>R</sub>		0.05	0.5	uA
Clamping voltage	I <sub>PP</sub> = 1 A, tp=8/20us	V <sub>C</sub>			5.5	V
	I <sub>PP</sub> = 5 A, tp=8/20us	V <sub>C</sub>			8.0	V
Reverse clamping voltage	I <sub>PPR</sub> = 1 A, tp=8/20us	V <sub>CR</sub>			2.4	V
Junction capacitance	V <sub>R</sub> = 0 V, f = 1MHz	C <sub>j</sub>		12	16	pF

Company reserves the right to improve product design , functions and reliability without notice.

REV:C

## RATING AND CHARACTERISTIC CURVES (CPDU3V3UP-HF)

Fig.1 - Definitions of Electrical Characteristics

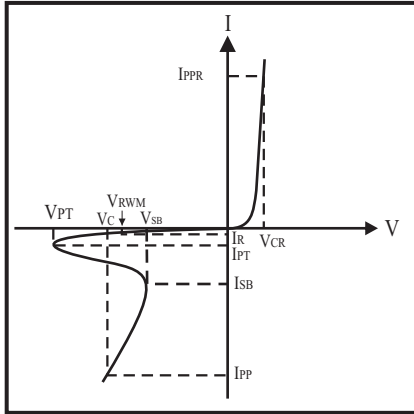


Fig.2 - Non-Repetitive Max. Peak Pulse Power vs. Pulse Time

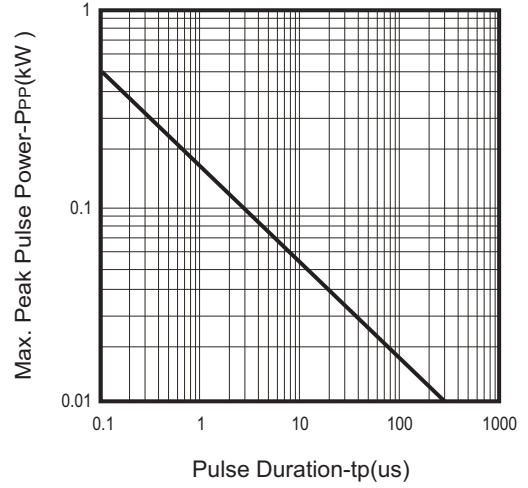


Fig.3 - Power Rating Derating Curve

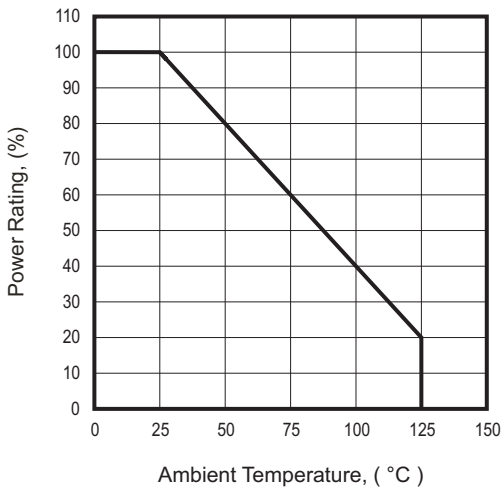


Fig.4 - Clamping Voltage Vs. Peak Pulse Current

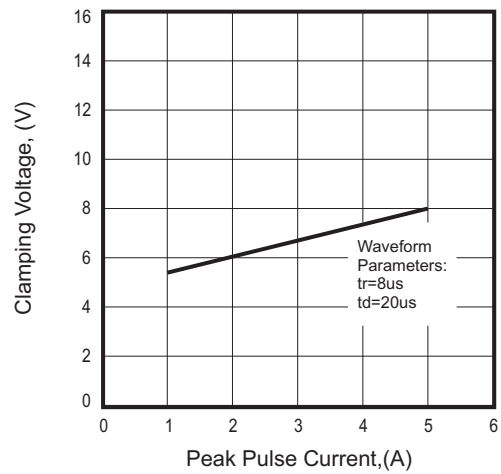


Fig.5 - Forward Voltage Vs. Forward Current

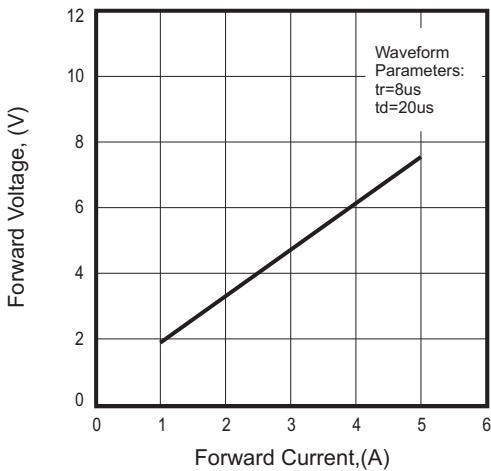
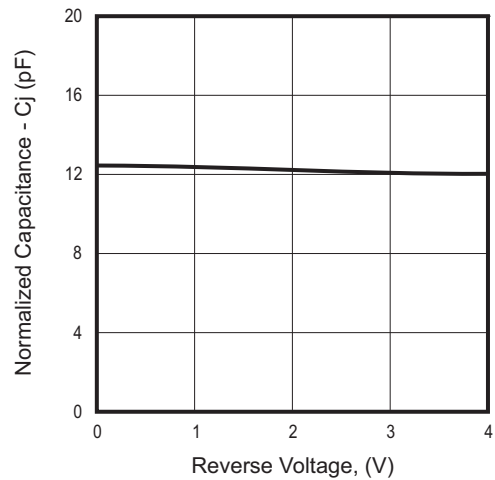


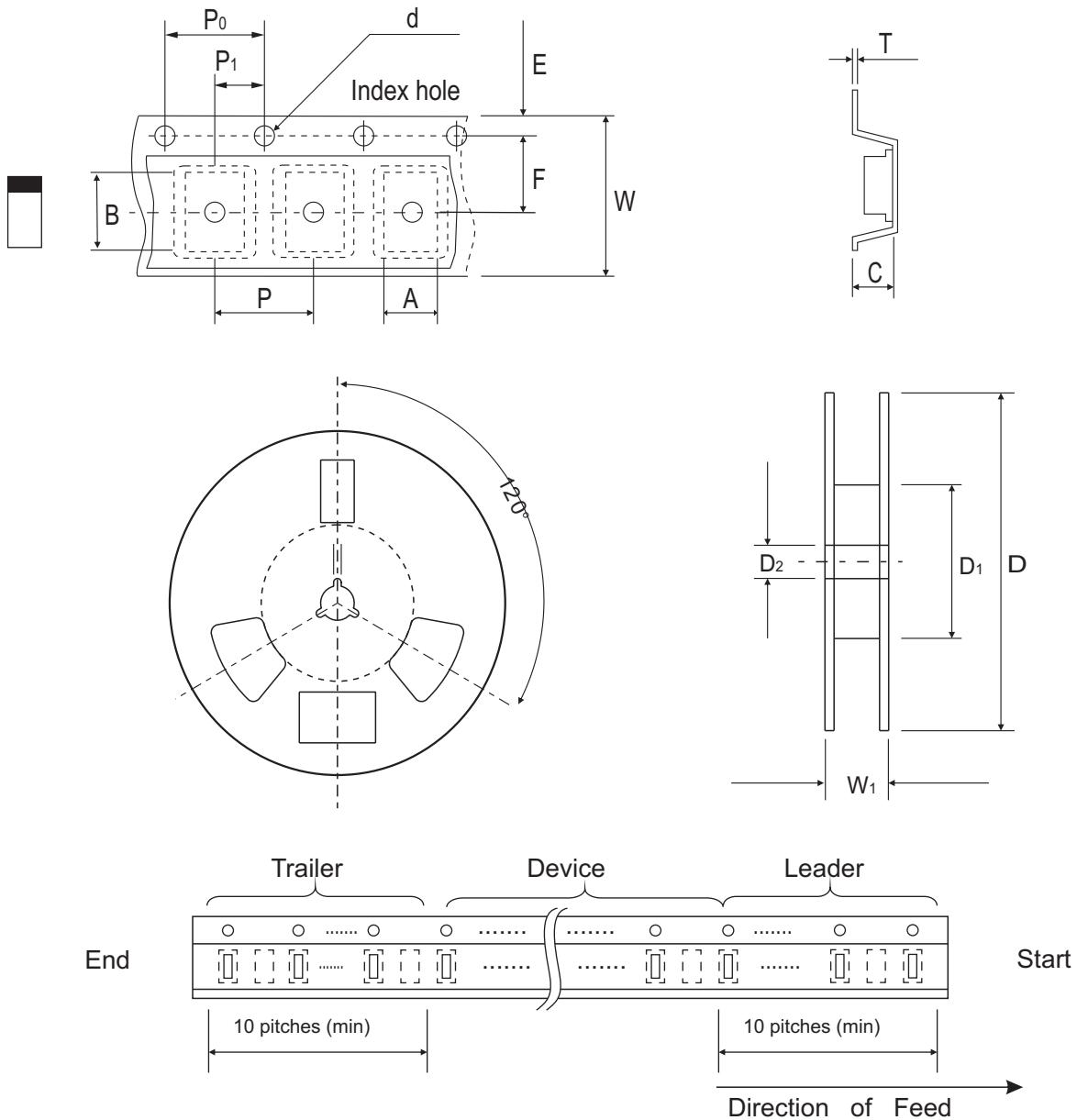
Fig.6 - Junction Capacitance Vs. Reverse Voltage



Company reserves the right to improve product design, functions and reliability without notice.

REV:C

## Reel Taping Specification



0603 (SOD-523)	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	1.00 ± 0.10	1.85 ± 0.10	1.00 ± 0.10	1.55 ± 0.05	178 ± 1	60.0 MIN.	13.0 ± 0.20
	(inch)	0.039 ± 0.004	0.073 ± 0.004	0.039 ± 0.004	0.061 ± 0.002	7.008 ± 0.04	2.362 MIN.	0.512 ± 0.008

0603 (SOD-523)	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	T	W	W <sub>1</sub>
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.23 ± 0.05	8.00 ± 0.20	13.5 MAX.
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.002	0.315 ± 0.008	0.531 MAX.

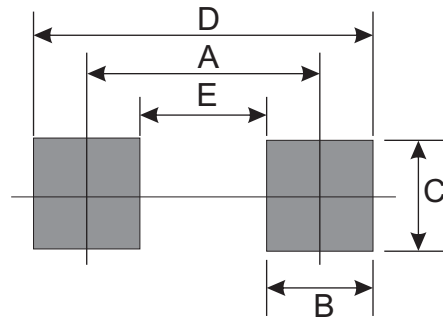
## Marking Code

Part Number	Marking Code
CPDU3V3UP-HF	E3V3



## Suggested PAD Layout

SIZE	0603/SOD-523F	
	(mm)	(inch)
A	1.70	0.067
B	0.60	0.024
C	0.80	0.031
D	2.30	0.091
E	1.10	0.043



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
0603/SOD-523F	4,000	7

## 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 [Comchip](#) manufacturer:*

Other Similar products are found below :

[60KS200C](#) [D12V0H1U2WS-7](#) [D18V0L1B2LP-7B](#) [82356050220](#) [D5V0M5U6V-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE39CA-TP](#)  
[P6KE8.2A](#) [SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ8.0A](#) [SMLJ30CA-TP](#) [ESD101-B1-02ELS 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](#) [ESD203-B1-02EL E6327](#) [SM12-7](#) [SMF8.0A-TP](#) [SMLJ45CA-TP](#) [CEN955 W/DATA](#) [82350120560](#)  
[82356240030](#) [VESD12A1A-HD1-GS08](#) [CPDUR5V0R-HF](#) [CPDUR24V-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#) [CPDQC5V0-HF](#)  
[D1213A-01LP4-7B](#) [D1213A-02WL-7](#) [ESDLIN1524BJ-HQ](#) [5KP100A](#) [5KP15A](#)