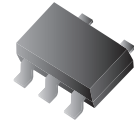


## CPDV5-3V3UP-HF

RoHS Device  
Halogen Free



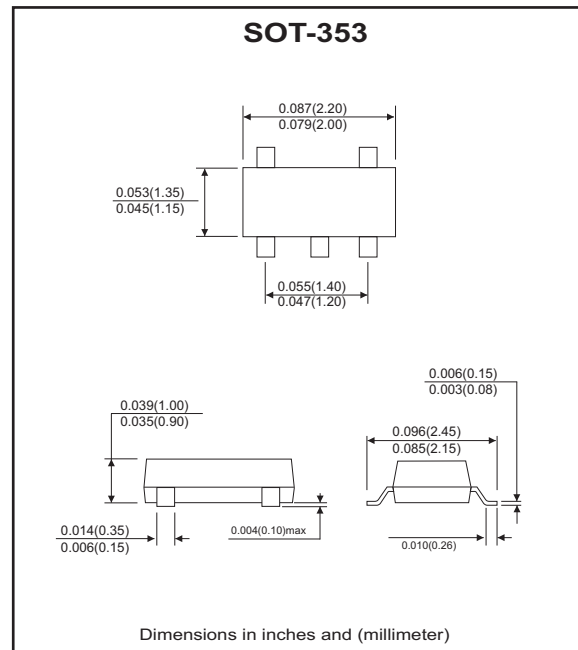
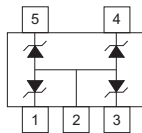
### Features

- IEC61000-4-2 (ESD)  $\pm 15$  kV(Contact),  $\pm 20$  kV(Air).
- Working voltage: 3.3V
- Low leakage current.
- Low operating and clamping voltages.

### Mechanical data

- Case: SOT-353 standard package ,molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750,method 2026.
- Mounting position: Any
- Weight: 0.0070 gram (approx.).

### Circuit Diagram



### Maximum Ratings (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)	IPP	5	A
ESD per IEC 61000-4-2(Air) ESD per IEC 61000-4-2(Contact)	VESD	$\pm 20$ $\pm 15$	kV
Operating temperature	Tj	-55 to +125	°C
Storage temperature	TSTG	-55 to +125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		VRWM			3.3	V
Punch-through voltage	IP T = 2uA	VPT	3.5			V
Snap-back voltage	ISB = 50mA	VSB	2.8			V
Reverse leakage current	VRWM = 3.3V	IR		0.05	0.5	uA
Clamping voltage	IPP = 1 A, tp=8/20us	Vc			5.5	V
	IPP = 5 A, tp=8/20us	Vc			8.0	V
Reverse clamping voltage	IPPR = 1 A, tp=8/20us	VCR			2.4	V
Junction capacitance	VR = 0 V, f = 1MHz	Cj		12	16	pF

## RATING AND CHARACTERISTIC CURVES (CPDV5-3V3UP-HF)

Fig.1 - Non-repetitive max. peak pulse power vs. pulse time

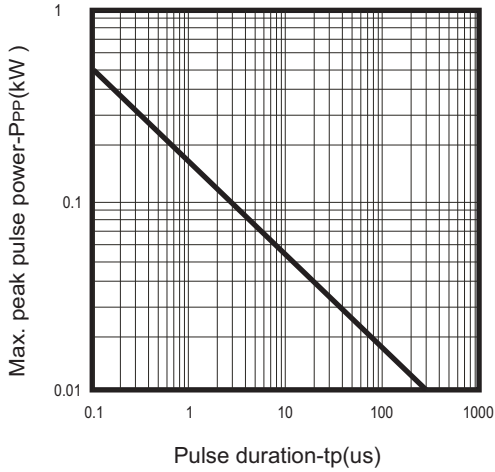


Fig.2 - Power rating derating curve

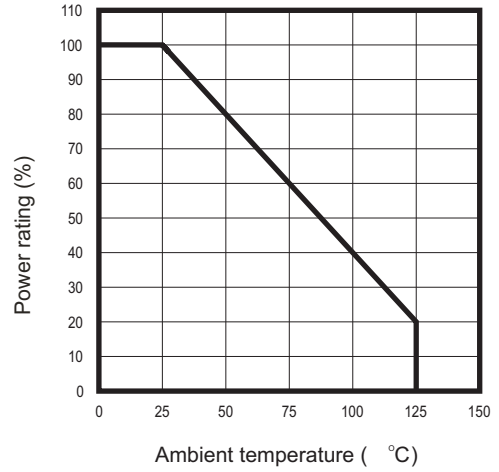


Fig.3 - Clamping voltage vs. peak pulse current

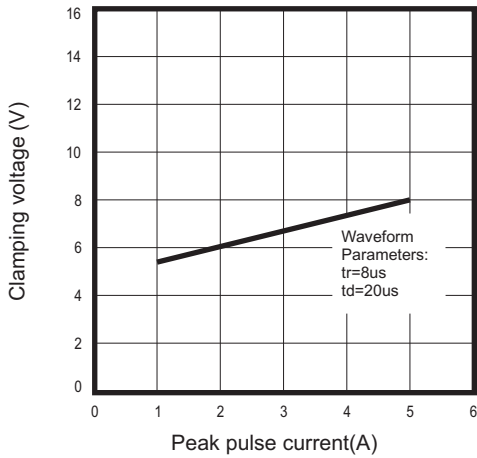


Fig.4 - Forward voltage vs. Forward current

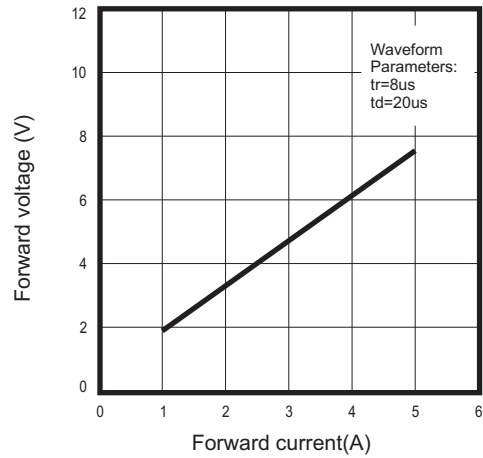
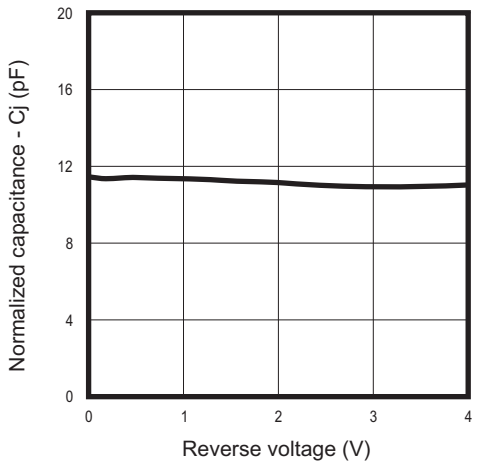
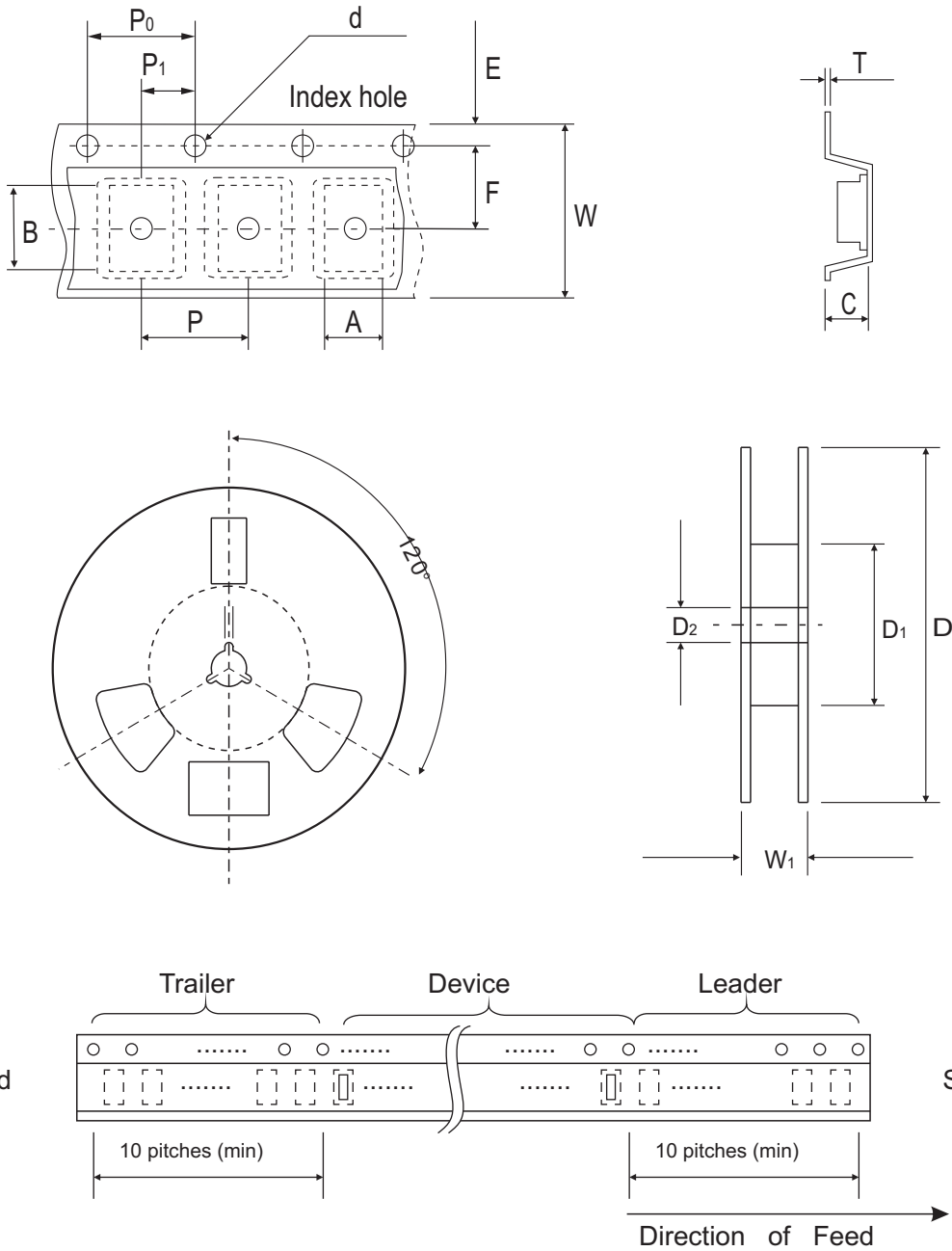


Fig.5 - Junction capacitance vs. reverse voltage



## Reel Taping Specification

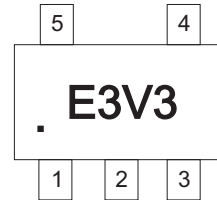


SOT-353	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.25 ± 0.10	2.55 ± 0.10	1.20 ± 0.10	1.50 ± 0.10	178 ± 1.00	54.40 ± 0.40	13.0 ± 0.20
	(inch)	0.089 ± 0.004	0.100 ± 0.004	0.047 ± 0.004	0.059 ± 0.004	7.008 ± 0.039	2.142 ± 0.016	0.512 ± 0.008

SOT-353	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	8.00 ± 0.30 / - 0.10	9.50 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.158 ± 0.004	0.158 ± 0.004	0.079 ± 0.004	0.315 ± 0.012 / - 0.004	0.374 ± 0.039

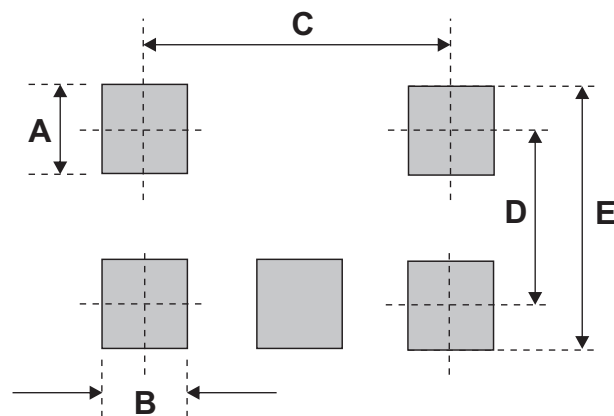
## Marking Code

Part Number	Marking Code
CPDV5-3V3UP-HF	E3V3



## Suggested PAD Layout

SIZE	SOT-353	
	(mm)	(inch)
A	0.80	0.031
B	0.35	0.014
C	1.30	0.051
D	1.94	0.076
E	2.74	0.108



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
SOT-353	3,000	7