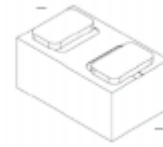


## CPDVR5V0-HF

**RoHS Device**  
**Halogen Free**



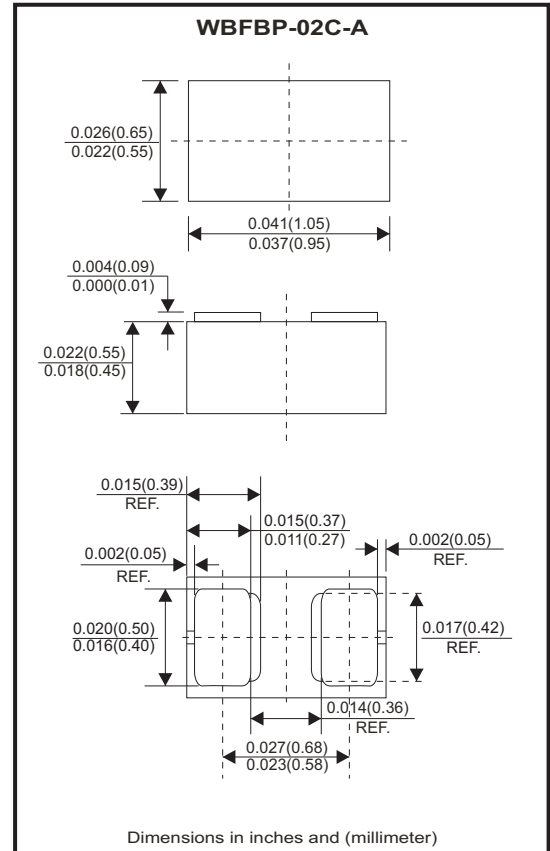
### Features

- IEC61000-4-2 Level 4 ESD Protection.
- Bi-directional ESD protection of one line.
- JESD22-A114-B ESD Rating of class 3B per human body model.
- Fast response time.
- Low leakage current.
- Low reverse clamping voltage.

### Mechanical data

- Case: WBFBP-02C-A Plastic-Encapsulate Diodes
- Terminals: Tin plated, solderable per MIL-STD-750,method 2026.
- Marking code: Y
- Mounting position: Any.

### Circuit Diagram



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

Parameter	Symbol	Limit	Unit
IEC 61000-4-2 ESD Voltage	V <sub>ESD</sub> <sup>(1)</sup>	±25	kV
		±25	
		±16	
		±0.4	
Peak Pulse Power	P <sub>PP</sub> <sup>(2)</sup>	40	W
Peak Pulse Current	I <sub>PP</sub> <sup>(2)</sup>	4	A
Lead Solder Temperature - Maximum (10 Second Duration)	T <sub>L</sub>	260	°C
Junction temperature	T <sub>J</sub>	150	°C
Storage temperature rang	T <sub>STG</sub>	-55 to +150	°C

Notes:

(1) Device stressed with ten non-repetitive ESD pulses.

(2) Non-repetitive current pulse 8/20µs exponential decay waveform according to IEC61000-4-5.

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

REV: C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand-off voltage		$V_{RWM}^{(1)}$	-	-	5	V
Reverse leakage current	$V_{RWM} = 5\text{ V}$	$I_R$	-	-	0.1	$\mu\text{A}$
Breakdown voltage	$I_T = 1\text{ mA}$	$V_{(BR)}$	5.8	-	8.0	V
Clamping voltage	$I_{PP} = 4\text{ A}$	$V_C^{(2)}$	-	-	10	V
Junction capacitance	$V_R = 0\text{ V}, f = 1\text{ MHz}$	$C_J$	-	12	15	pF

Notes:

(1) Other voltages available upon request.

(2) Non-repetitive current pulse 8/20 $\mu\text{s}$  exponential decay waveform according to IEC61000-4-5.

## RATING AND CHARACTERISTIC CURVES (CPDVR5V0-HF)

Fig.1 - Reverse Characteristics

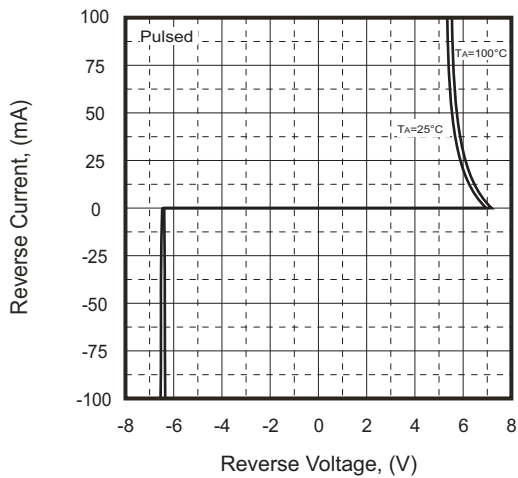


Fig.2 - Capacitance Characteristics

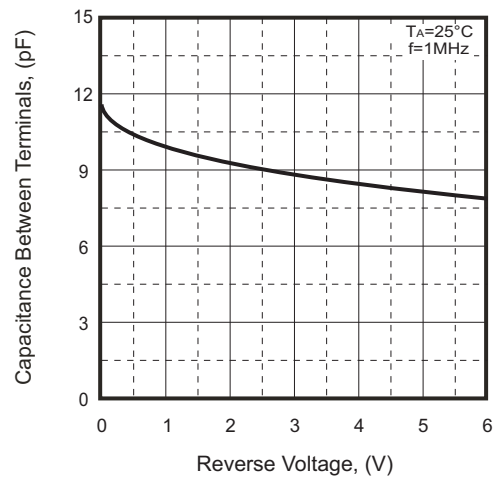
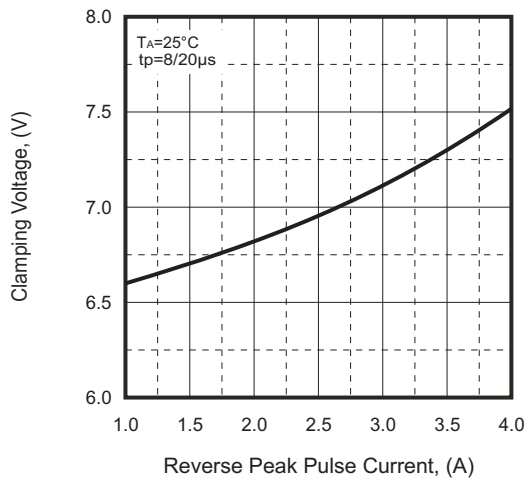
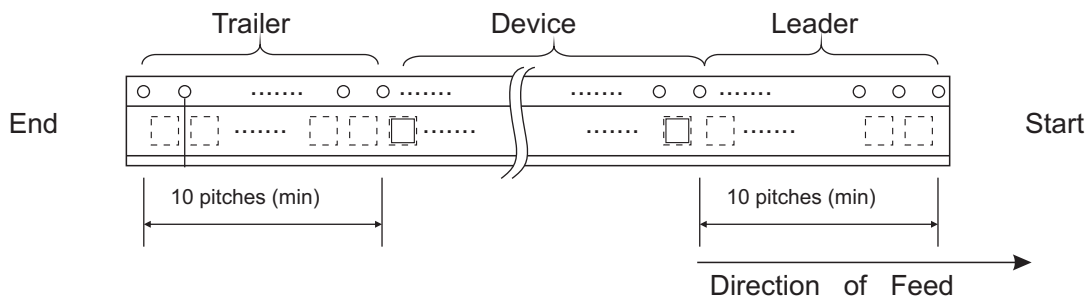
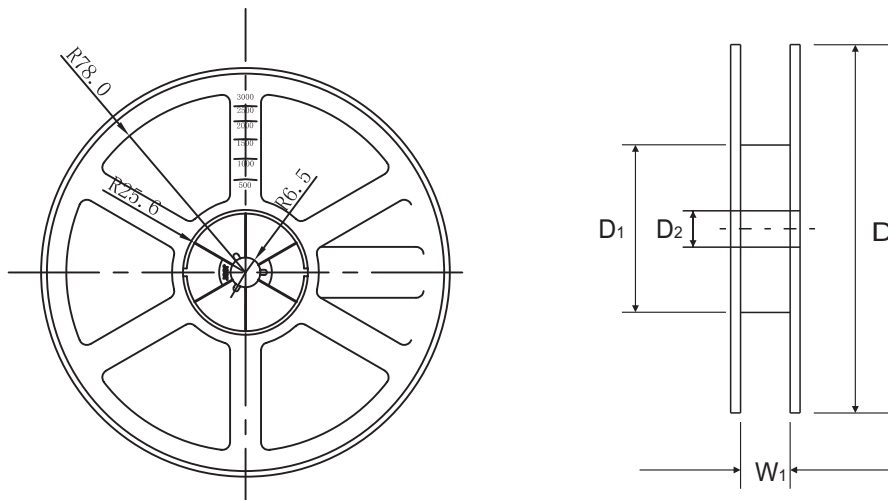
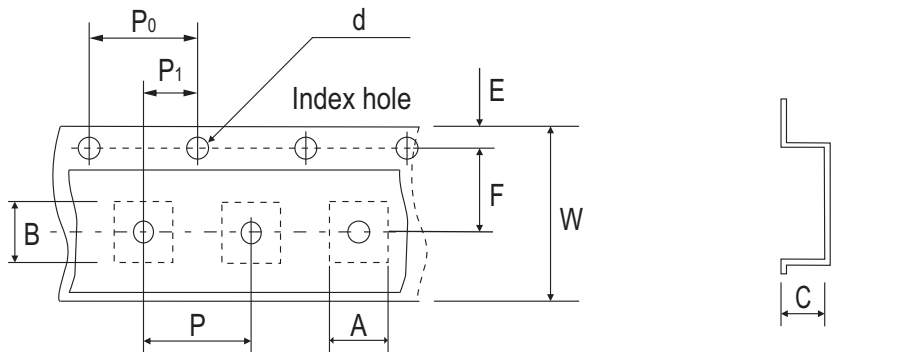


Fig.3 -  $V_C$  —  $I_{PP}$



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## Reel Taping Specification



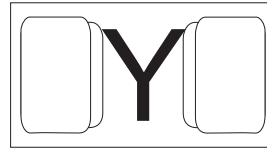
WFBP-02C-A	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	0.66 ± 0.05	1.15 ± 0.05	0.66 ± 0.05	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.026 ± 0.002	0.045 ± 0.002	0.026 ± 0.002	0.059 ± 0.004	7.008 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

WFBP-02C-A	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	2.00 ± 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 ± 0.004	0.079 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.315 + 0.012 / - 0.004	0.374 ± 0.039

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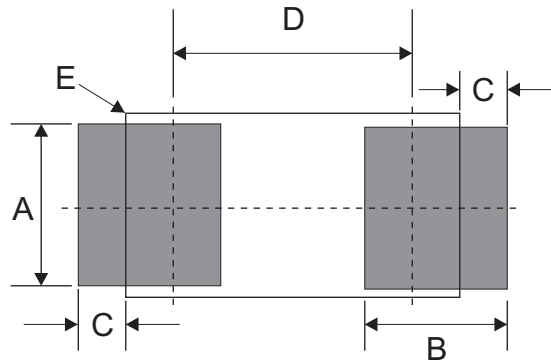
## Marking Code

Part Number	Marking Code
CPDVR5V0-HF	Y



## Suggested PAD Layout

SIZE	WBFBP-02C-A	
	(mm)	(inch)
A	0.55	0.022
B	0.52	0.020
C	0.15	0.006
D	0.63	0.025
E	1.00*0.60 PKG.	



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
WBFBP-02C-A	10,000	7