



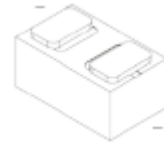
THE DATASHEET OF CPDVR7V0-HF



CPDVR7V0-HF

RoHS Device

Halogen Free



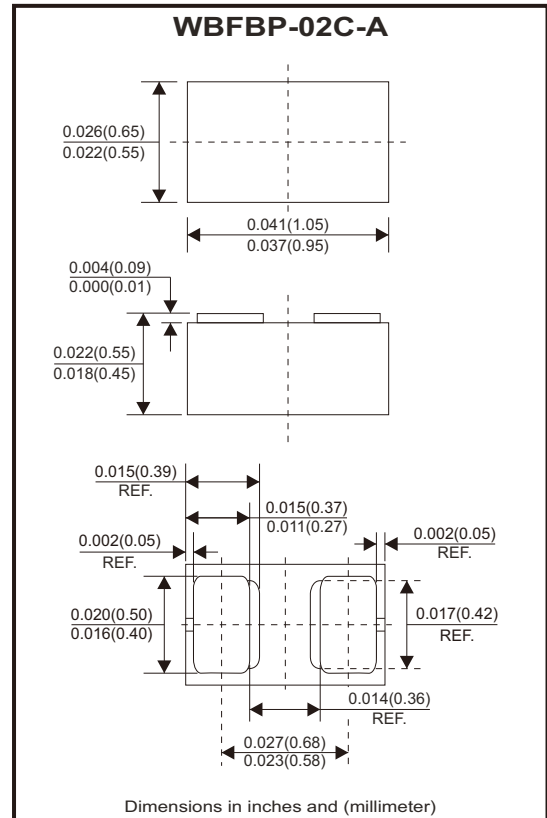
Features

- Bi-directional ESD protection of one line.
- Reverse stand-off voltage: 7V.
- Low reverse clamping voltage.
- Low leakage current.
- Excellent package: 1.0mm x 0.6mm x 0.5mm.
- Fast response time.
- JESD22-A114-B ESD rating of class 3B per human body model.
- IEC 61000-4-2 Level 4 ESD protection.

Mechanical data

- Case: WBFBP-02C-A package, molded plastic.

Circuit Diagram



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

Parameter	Symbol	Value	Unit
IEC 61000-4-2 ESD voltage air model	V _{ESD} (Note 1)	±25	kV
IEC 61000-4-2 ESD voltage contact model			
JESD22-A114-B ESD voltage per human body model			
ESD voltage machine model		±0.4	
Peak pulse power (Note 2)	P _{PP}	85	W
Peak pulse current (Note 2)	I _{PP}	5	A
Lead solder temperature - maximum (10 second duration)	T _L	260	°C
Junction temperature	T _J	150	°C
Storage temperature range	T _{STG}	-55 ~ +150	°C

Notes: 1. Device stressed with ten non-repetitive ESD pulses.
2. Non-repetitive current pulse 8/20μs exponential decay waveform according to IEC 61000-4-5.

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Reverse stand off voltage (Note 1)		V_{RWM}			7.0	V
Reverse leakage current	$V_{RWM} = 7V$	I_R			1	μA
Breakdown voltage	$I_T = 1mA$	$V_{(BR)}$	8.2		10.5	V
	$I_T = 100mA$		7.0			
Clamping voltage (Note 2)	$I_{PP} = 5A$	V_C			17	V
Junction capacitance	$V_R = 0V, f = 1MHz$	C_J		9		pF

Notes: 1. Other voltages available upon request.

2. Non-repetitive current pulse 8/20 μs exponential decay waveform according to IEC 61000-4-5.

Rating and Characteristic Curves (CPDVR7V0-HF)

Fig.1 - 8/20 μs Peak Pulse Current Waveform Acc. IEC 61000-4-5

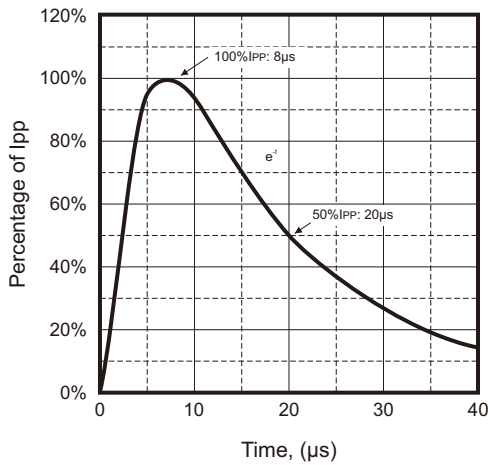


Fig.2 - Reverse Characteristics

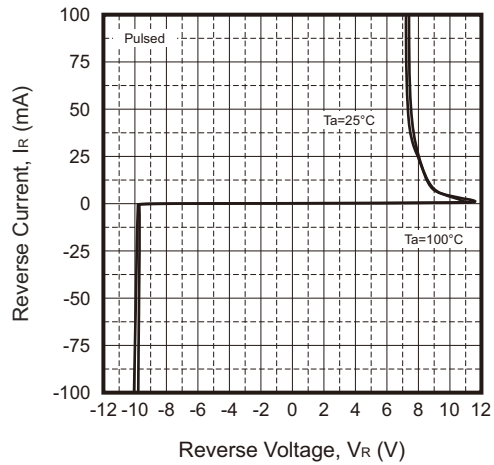


Fig.3 - Capacitance Characteristics

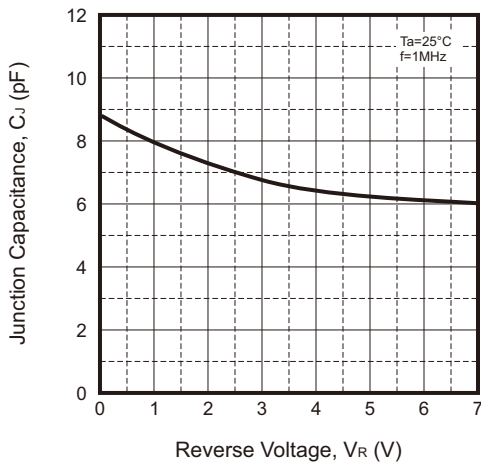
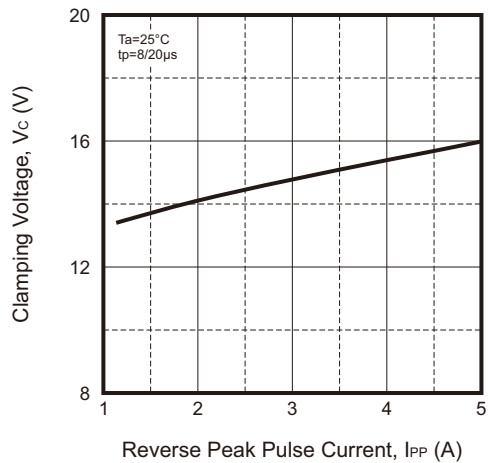
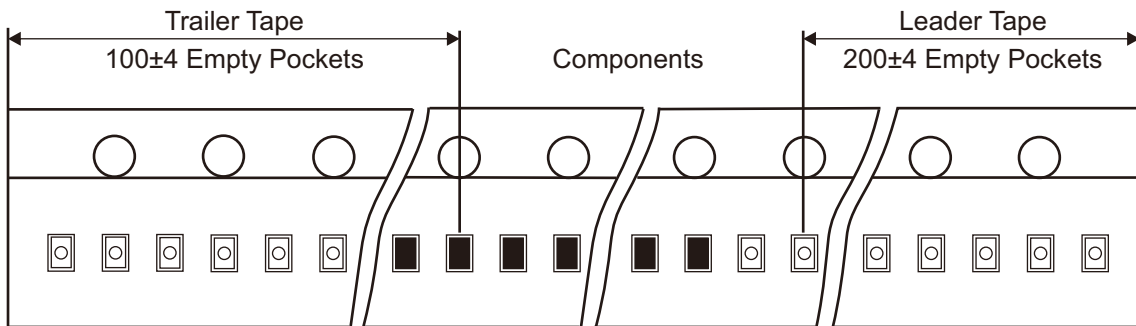
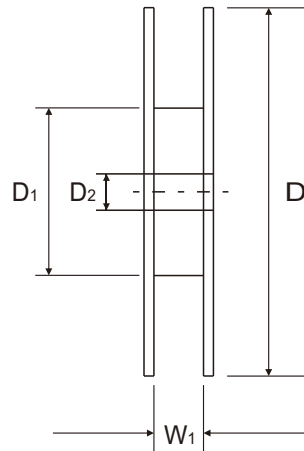
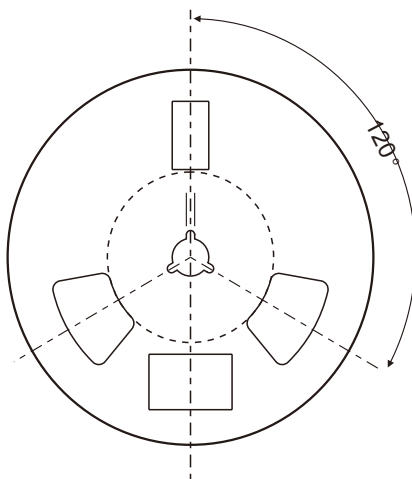
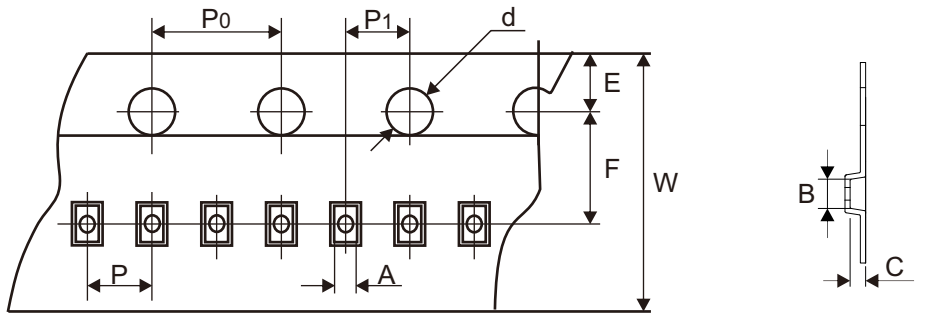


Fig.4 - VC — IPP



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

Reel Taping Specification



WFBFP-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

WFBFP-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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REV:A

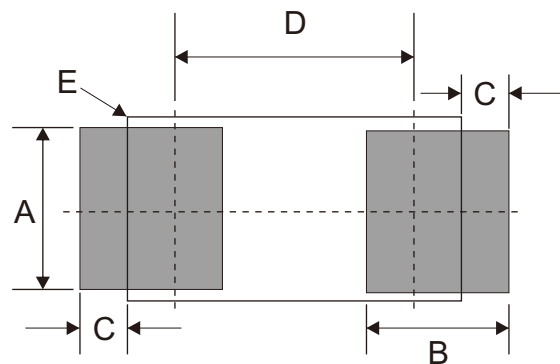
Marking Code

Part Number	Marking Code
CPDVR7V0-HF	Z



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.	



Notes: 1.The pad layout is for reference purposes only.

Standard Packaging

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

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