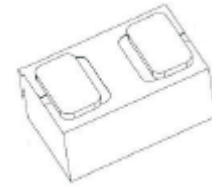


CPDVR5V0P-HF

RoHS Device
Halogen Free



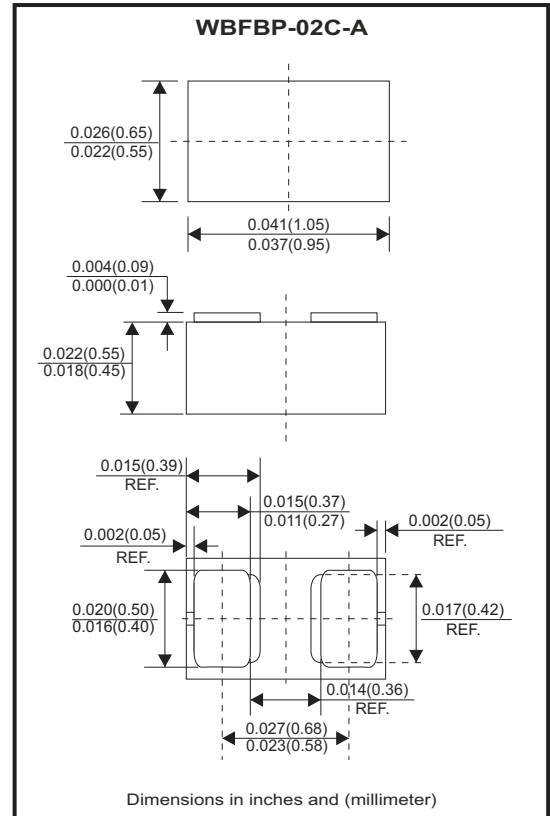
Features

- IEC61000-4-2 Level 4 ESD Protection.
- Bi-directional ESD protection of one line.
- Fast response time.
- Low Leakage current.
- Low reverse clamping voltage.
- Low capacitance.

Mechanical data

- Case: WBFBP-02C-A plastic-encapsulate diodes
- Terminals: Tin plated, solderable per MIL-STD-750, method 2026.
- Mounting position: Any.

Circuit Diagram



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

| Parameter | Symbol | Value | Unit |
|--|-----------------------------------|-------------|------|
| ESD per IEC 61000-4-2(Air) | V _{ESD} ⁽¹⁾ | ±15 | kV |
| ESD per IEC 61000-4-2(Contact) | | ±15 | |
| JESD22-A114-B ESD Voltage ESD Voltage | | ±16 0.4 | |
| Peak Pulse Power | P _{PP} ⁽³⁾ | 52 | W |
| Peak Pulse Current | I _{PP} ⁽³⁾ | 4 | A |
| Lead Solder Temperature | TL | 260 | °C |
| Junction & Storage temperature range | T _J , T _{STG} | -55 to +150 | °C |

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

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|---------------------------|--------------------------------|---------------------------------|-----|-----|-----|------|
| Reverse stand-Off voltage | | V _{RWM} ⁽²⁾ | | | 5 | V |
| Reverse leakage current | V _{RWM} = 5 V | I _R | | | 1 | µA |
| Breakdown voltage | I _T = 1 mA | V _(BR) | 5.6 | | 8 | V |
| Clamping voltage | I _{PP} = 4 A | V _C ⁽³⁾ | | | 13 | V |
| Junction capacitance | V _R = 0V , F = 1MHz | C _J | | 3 | | pF |

Notes: 1. Device stressed with ten non-repetitive ESD pulses.
 2. Other voltages available upon request.
 3. Non-repetitive current pulse 8/20µs exponential decay waveform according to IEC61000-4-5.

RATING AND CHARACTERISTIC CURVES (CPDVR5V0P-HF)

Fig.1 - 8/20us Peak Pulse Current Waveform ACC. IEC 61000-4-5

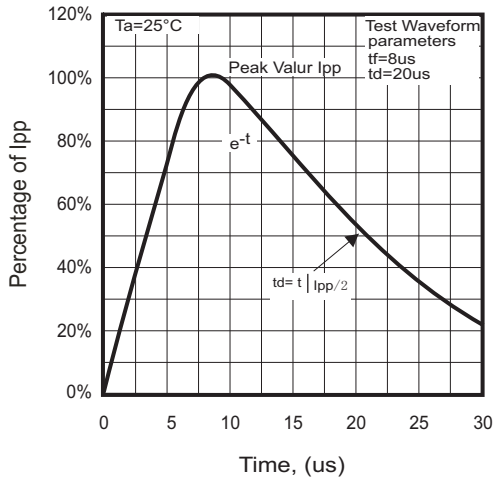


Fig.2 - Typical Capacitance Characteristics

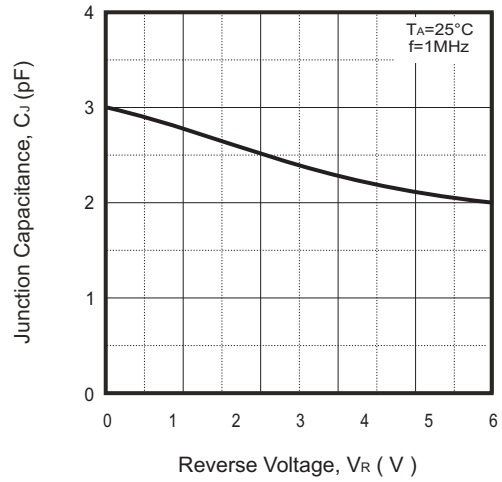
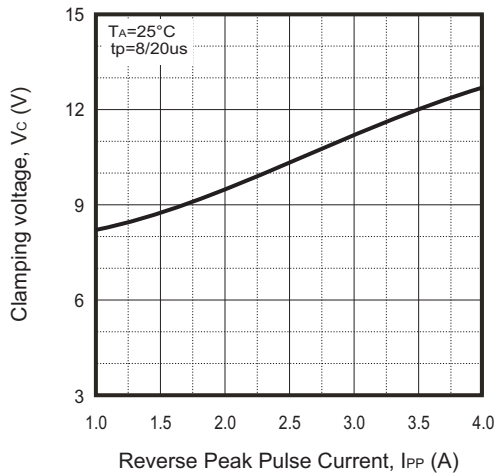
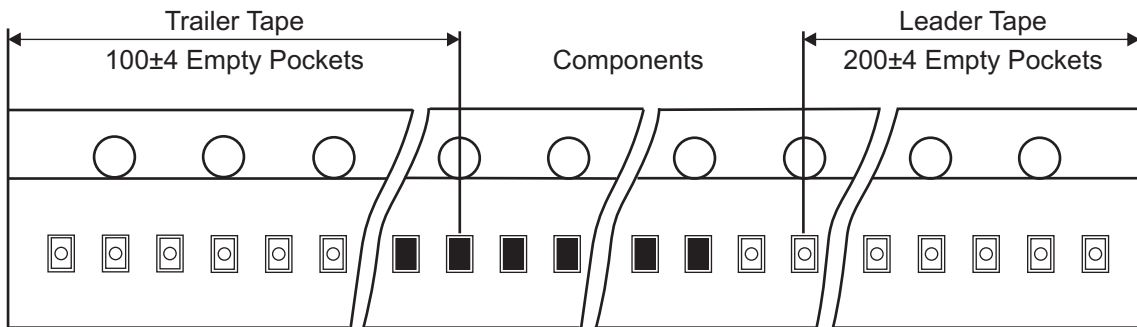
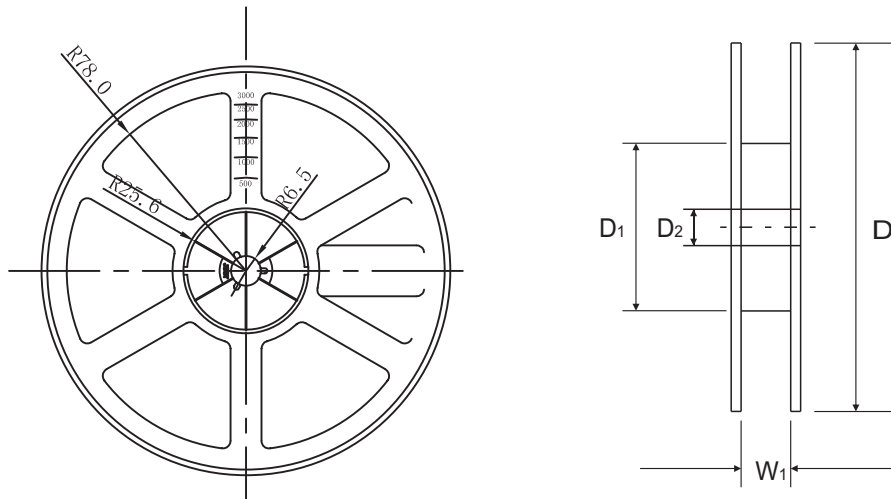
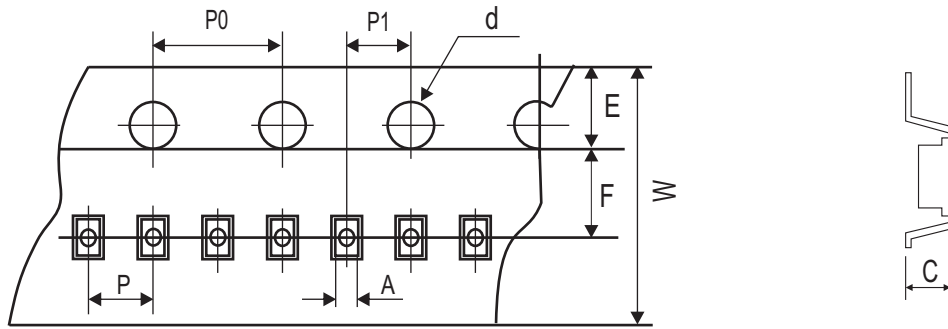


Fig.3 - Clamping Voltage Vs. Peak Pulse Current



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 |

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

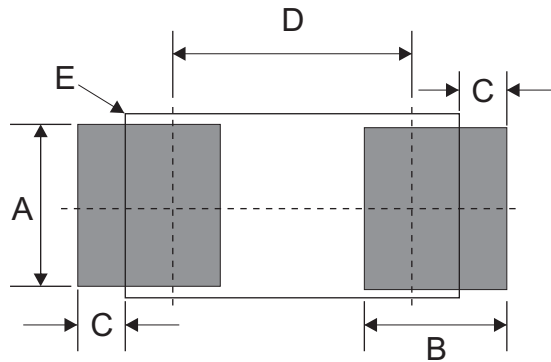
Marking Code

| Part Number | Marking Code |
|--------------|--------------|
| CPDVR5V0P-HF | HD |



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 |