Bourns® voltage control devices are used with high-speed series protectors to protect sensitive circuits from electrical disturbances caused by lightning-induced surges, inductive-coupled spikes, and AC power cross conditions. The unique structure and characteristics of the device are used to create an overvoltage protection device with precise and repeatable turn-on characteristics with low voltage overshoot and high surge current capabilities.

### Specifications

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Surge Rating</th>
<th>Electrical Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IPP (A)</td>
<td>VDRM (V)</td>
</tr>
<tr>
<td>FVC2300</td>
<td>4</td>
<td>190</td>
</tr>
<tr>
<td>FVC3100</td>
<td>4</td>
<td>275</td>
</tr>
</tbody>
</table>

- **IPP** (peak pulse current) - maximum rated peak impulse current with 1.2/50 µs waveform.
- **VDRM** (peak off-state voltage) - maximum voltage that can be applied while maintaining off state measured at IDRM.
- **VS** (switching voltage) - maximum voltage prior to switching to on-state measured at 100 V/µs.
- **VT** (on-state voltage) - maximum voltage measured at rated on-state current.
- **IDRM** (leakage current) - maximum peak off-state current measured at VDRM.
- **IS** (switching current) - maximum current required to switch to on state.
- **IT** (on-state current) - maximum rated continuous on-state current.
- **IH** (holding current) - minimum current required to maintain on state.
- **CO** (off-state capacitance) - typical off-state capacitance measured at 1 MHz with a 2 V bias.

### Typical Performance Characteristics

- All measurements are at an ambient temperature of 25 °C. IPP applies to -40 °C through +85 °C.
- IPP is a repetitive surge rating and is designed to be maintained for the life of the product.
- The devices are bidirectional. All electrical parameters and surge ratings apply to forward and reverse polarities.
- Special voltage (VS and VDRM) and holding current (IH) requirements are available upon request.

Specifications are subject to change without notice.
Customers should verify actual device performance in their specific applications.
FVC Series Voltage Control Devices

Product Dimensions

<table>
<thead>
<tr>
<th>Dim.</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2.29 (0.090)</td>
<td>3.00 (0.118)</td>
</tr>
<tr>
<td>B</td>
<td>4.50 (0.177)</td>
<td>5.40 (0.213)</td>
</tr>
<tr>
<td>C</td>
<td>1.25 (0.050)</td>
<td>1.65 (0.065)</td>
</tr>
<tr>
<td>D</td>
<td>3.90 (0.154)</td>
<td>4.65 (0.183)</td>
</tr>
<tr>
<td>E</td>
<td>0.76 (0.030)</td>
<td>1.52 (0.060)</td>
</tr>
<tr>
<td>F</td>
<td>0.15 (0.006)</td>
<td>0.30 (0.012)</td>
</tr>
<tr>
<td>G</td>
<td>—</td>
<td>0.20 (0.008)</td>
</tr>
<tr>
<td>H</td>
<td>1.95 (0.077)</td>
<td>2.24 (0.088)</td>
</tr>
</tbody>
</table>

DIMENSIONS: MM (INCHES)

How to Order

FVC3100 - BK

Part Number
- FVC2300
- FVC3100

Packaging Indicator
BK = Packaged in tape and reel (1500 pieces per reel)

Typical Part Marking

MARKING NUMBER
V31A - FVC3100
V23A - FVC2300

MANUFACTURING DATE CODE

*TRANSITION FROM FULTEC TRADEMARK TO BOURNS TRADEMARK IN 2009.

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