BiPOM Electronics, Inc. VFD Displays

Character VFD’s

**VFD2041 Vacuum Fluorescent Display**
Alphanumeric Serial VFD, 20 characters x 4 lines. This Vacuum Fluorescent Display offers excellent speed, great looks, and wide operating temperature. Perfect for automotive applications.

- Character Size: 2.40 x 4.70 mm (XxY), not including underline
- Color of Illumination: Blue / Green
- Supply Voltage: 4.75-5.25 VDC (optional 8 - 35VDC)
- Supply Current: 40mA, display: 200mA, inrush: 540mA

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VFD2041</td>
<td>VFD Display, 4 rows of 20 characters</td>
</tr>
<tr>
<td>VFD2041-E</td>
<td>Extended temperature</td>
</tr>
<tr>
<td>VFD2041-VPT</td>
<td>Wide voltage, Efficient power supply</td>
</tr>
<tr>
<td>VFD2041-VPT-E</td>
<td>Extended temperature, Efficient supply</td>
</tr>
</tbody>
</table>

**VK162-12 Vacuum Fluorescent Display**
With Alphanumeric LCD with 12-key keypad interface, 16 x 2 characters. Keypad not included

- 16 characters x 2 lines
- Character Size: 2.95 x 5.55 mm
- Active Area: 64.50 x 17.50 mm
- Color of Illumination: Blue/Green
- Supply Voltage: 4.75-5.25 VDC (optional 9 - 15 VDC)
- Supply Current: 40mA, display current: 200mA, inrush current: 440mA

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VK162-12</td>
<td>2 rows of 20 characters, Keypad Interface</td>
</tr>
<tr>
<td>VK162-12-V</td>
<td>Wide Voltage</td>
</tr>
<tr>
<td>VK162-12-E</td>
<td>Extended temperature</td>
</tr>
<tr>
<td>VK162-12-V-E</td>
<td>Extended temperature, Wide Voltage</td>
</tr>
</tbody>
</table>

**VK202-25 Vacuum Fluorescent Display**
Alphanumeric Serial VFD with 25-key keypad interface, 20 characters x 2 lines. Keypad not included

- Matrix Format: 5 x 7 with underline
- Character Size: 2.40 x 4.70 mm (XxY), not including underline
- Active Area: 70.80 x 11.60 mm (XxY)
- Color of Illumination: Blue/Green
- Supply Voltage: 4.75—5.25 VDC (optional 9 - 15 VDC)
- Supply Current: 40mA, display current: 170mA, inrush current: 380mA

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VK202-25</td>
<td>2 rows of 20 characters, Keypad Interface</td>
</tr>
<tr>
<td>VK202-25-V</td>
<td>Wide Voltage</td>
</tr>
<tr>
<td>VK202-25-E</td>
<td>Extended temperature</td>
</tr>
<tr>
<td>VK202-25-V-E</td>
<td>Extended temperature, Wide Voltage</td>
</tr>
</tbody>
</table>

**VK204-25 Vacuum Fluorescent Display**
Alphanumeric Serial VFD with 25-key keypad interface, 20 characters x 4 lines. Keypad not included

- Matrix Format: 5 x 7 with underline
- Character Size: 2.40 x 4.70 mm (XxY), not including underline
- Active Area: 70.80 x 20.90 mm (XxY)
- Color of Illumination: Blue / Green
- Supply Voltage: 4.75-5.25 VDC (optional 8 - 35VDC)

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>VK204-25</td>
<td>4 rows of 20 characters, Keypad Interface</td>
</tr>
<tr>
<td>VK204-25-VPT</td>
<td>Wide voltage, Efficient power supply</td>
</tr>
<tr>
<td>VK204-25-E</td>
<td>Extended temperature</td>
</tr>
<tr>
<td>VK204-25-VPT-E</td>
<td>Extended temperature, Efficient supply</td>
</tr>
</tbody>
</table>

**VK204-25-VPT**
20 x 4 Characters Alphanumeric VFD Display
(Keypad not included)

- Active Area: 70.80 x 20.90 mm
- Character size: 2.40 x 4.70 mm
- Blue - Green illumination
- Supply Voltage: 4.75 to 5.25 VDC
- Supply Current: 40mA, display: 250mA, inrush: 540mA
- Communicates over USB
- 25 key keypad interface
Character VFD's

MOI-AV162A
I2C interface 16 x 2 Characters
Alphanumeric VFD Display.
- Active Area: 64.40 x 17.50 mm
- Character size: 2.95 x 5.55 mm
- Blue - Green illumination
- Supply Voltage: 4.75 to 5.25 VDC
- Supply Current: 25mA, display : 150mA, inrush : 300mA

MOI-AV202C
I2C interface 20 x 2 Characters
Alphanumeric VFD Display.
- Active Area: 70.80 x 11.60 mm
- Character size: 2.40 x 4.70 mm
- Blue - Green illumination
- Supply Voltage: 4.75 to 5.25 VDC
- Supply Current: 40mA, display : 170mA, inrush : 380mA

MOS-AV162A
RS232 interface 16 x 2 Characters
Alphanumeric VFD Display.
- Active Area: 64.50 x 17.50 mm
- Character size: 2.95 x 5.55 mm
- Blue - Green illumination
- Supply Voltage: 4.75 to 5.25 VDC
- Supply Current: 25mA, display : 150mA, inrush : 300mA

MOS-AV202C
RS232 interface 20 x 2 Characters
Alphanumeric VFD Display.
- Active Area: 70.80 x 11.60 mm
- Character size: 2.40 x 4.70 mm
- Blue - Green illumination
- Supply Voltage: 4.75 to 5.25 VDC
- Supply Current: 40mA, display : 170mA, inrush : 380mA

MOU-AV162A
USB interface 16 x 2 Characters
Alphanumeric VFD Display.
- Active Area: 64.50 x 17.50 mm
- Character size: 2.95 x 5.55 mm
- Blue - Green illumination
- Supply Voltage: 4.75 to 5.25 VDC
- Supply Current: 25mA, display : 150mA, inrush : 300mA

MOU-AV202C
USB interface 20 x 2 Characters
Alphanumeric VFD Display.
- Active Area: 70.80 x 11.60 mm
- Character size: 2.40 x 4.70 mm
- Blue - Green illumination
- Supply Voltage: 4.75 to 5.25 VDC
- Supply Current: 40mA, display : 170mA, inrush : 380mA

MOP-AV162A
16 x 2 Characters
Alphanumeric parallel VFD Display.
- Active Area: 64.50 x 17.50 mm
- Character size: 2.95 x 5.55 mm
- Controller: HD44780
- Supply Voltage: 4.75 to 5.25 VDC
- Supply Current: 25mA, display : 150mA, inrush : 300mA

MOP-AV202C
20 x 2 Characters
Alphanumeric parallel VFD Display.
- Active Area: 70.80 x 11.60 mm
- Character size: 2.40 x 4.70 mm
- Controller: HD44780
- Supply Voltage: 4.75 to 5.25 VDC
- Supply Current: 40mA, display : 170mA, inrush : 380mA

MOP-AV204A
20 x 4 Characters
Alphanumeric parallel VFD Display.
- Active Area: 70.80 x 20.90 mm
- Character size: 2.40 x 4.70 mm
- Controller: HD44780
- Supply Voltage: 4.75 to 5.25 VDC
- Supply Current: 40mA, display : 170mA, inrush : 380mA

VFD Filters

<table>
<thead>
<tr>
<th>Product</th>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRY202</td>
<td>2 x 20</td>
<td>Circular Polarized and hard coated Gray</td>
</tr>
<tr>
<td>GRY204</td>
<td>4 x 20</td>
<td>Standard Blue Filter</td>
</tr>
<tr>
<td>BLU202</td>
<td>2 x 20</td>
<td>Standard Blue Filter</td>
</tr>
<tr>
<td>BLU204</td>
<td>4 x 20</td>
<td>Standard Green Filter</td>
</tr>
<tr>
<td>GRN202</td>
<td>2 x 20</td>
<td>Standard Green Filter</td>
</tr>
<tr>
<td>GRN204</td>
<td>4 x 20</td>
<td>Standard Red Filter</td>
</tr>
<tr>
<td>RED202</td>
<td>2 x 20</td>
<td>Standard Red Filter</td>
</tr>
<tr>
<td>RED204</td>
<td>4 x 20</td>
<td>Standard Red Filter</td>
</tr>
</tbody>
</table>

A VFD will wash out in direct sunlight. The advantage of a filter is to provide better contrast and protection for the VFD. There are two main types: Circular and regular polarized. Circular polarized come in gray and are hard coated providing the ultimate outdoor filter. The regular filters are a less expensive solution for indoor VFD's, but still can be used outdoors. This, however, will not provide the same protection as the gray ones. All filters are available in 2 x 20 and the 4 x 20 sizes.