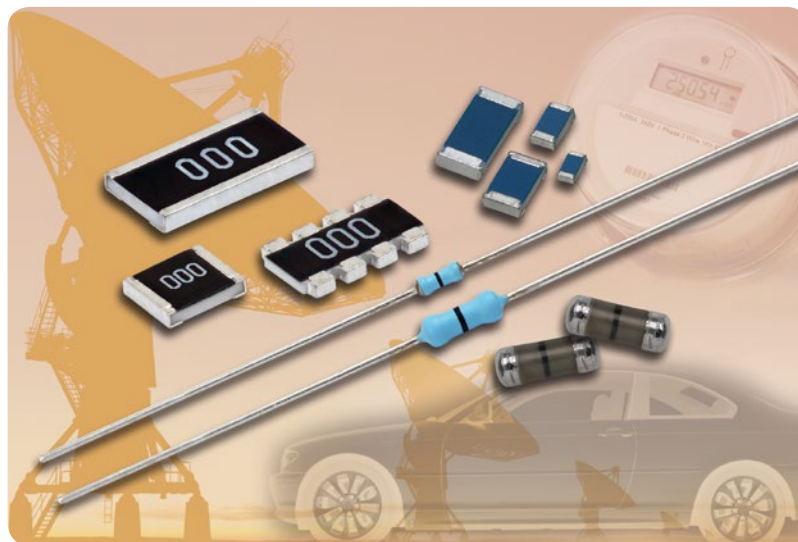




## Zero Ohm Jumpers



### KEY FEATURES AND BENEFITS

- Serve as bridge over copper conductors on PCB
- High current density in small packages
- Very low resistance values
- Multiple sizes in SMD and through-hole devices
- Lead (Pb)-free and tin-lead termination options

### APPLICATIONS

- Automotive
- Industrial
- Communications
- Consumer
- Avionics
- Computer

### CONTACT

- For technical questions contact [thickfilmchip@vishay.com](mailto:thickfilmchip@vishay.com); [thinfilmchip@vishay.com](mailto:thinfilmchip@vishay.com); [melf@vishay.com](mailto:melf@vishay.com); [filmresistorsleaded@vishay.com](mailto:filmresistorsleaded@vishay.com); and [specialresistors@vishay.com](mailto:specialresistors@vishay.com)





# VISHAY DRALORIC/BEYSCHLAG

## Resistors Division

Jumpers - High Current Density in Small Packages

### Resources

| Product            | Datasheet  | Technical Questions  |  |
|--------------------|--|--|--|
| CRCW01005 e3       | <a href="http://www.vishay.com/doc?20056">www.vishay.com/doc?20056</a> | <a href="mailto:thickfilmchip@vishay.com">thickfilmchip@vishay.com</a>             |  |
| CRCW0201 e3        | <a href="http://www.vishay.com/doc?20052">www.vishay.com/doc?20052</a> |  |  |
| CRCW e3            | <a href="http://www.vishay.com/doc?20035">www.vishay.com/doc?20035</a> |  |  |
| CRCW (Sn/Pb)       | <a href="http://www.vishay.com/doc?20008">www.vishay.com/doc?20008</a> |  |  |
| CRCW-HP e3         | <a href="http://www.vishay.com/doc?20043">www.vishay.com/doc?20043</a> |  |  |
| RCG e3             | <a href="http://www.vishay.com/doc?20047">www.vishay.com/doc?20047</a> |  |  |
| RCL e3             | <a href="http://www.vishay.com/doc?20046">www.vishay.com/doc?20046</a> |  |  |
| D-AP/CRCW-AP       | <a href="http://www.vishay.com/doc?20038">www.vishay.com/doc?20038</a> |  |  |
| RCA e3             | <a href="http://www.vishay.com/doc?20037">www.vishay.com/doc?20037</a> |  |  |
| RCA (Sn/Pb)        | <a href="http://www.vishay.com/doc?20034">www.vishay.com/doc?20034</a> |  |  |
| CRA06E/S           | <a href="http://www.vishay.com/doc?31002">www.vishay.com/doc?31002</a> |  |  |
| CRA12E/S           | <a href="http://www.vishay.com/doc?31003">www.vishay.com/doc?31003</a> |  |  |
| CRA04P             | <a href="http://www.vishay.com/doc?31048">www.vishay.com/doc?31048</a> |  |  |
| CRA06P             | <a href="http://www.vishay.com/doc?31047">www.vishay.com/doc?31047</a> |  |  |
| CRA04S             | <a href="http://www.vishay.com/doc?31043">www.vishay.com/doc?31043</a> |  |  |
| CRCW EN802         | <a href="http://www.vishay.com/doc?28806">www.vishay.com/doc?28806</a> |  | <a href="mailto:thinfilmchip@vishay.com">thinfilmchip@vishay.com</a> |
| D EN802 (Sn/Pb)    | <a href="http://www.vishay.com/doc?28808">www.vishay.com/doc?28808</a> |  |  |
| MC AT Professional | <a href="http://www.vishay.com/doc?28760">www.vishay.com/doc?28760</a> | <a href="mailto:thinfilmchip@vishay.com">thinfilmchip@vishay.com</a>               |  |
| MC Professional    | <a href="http://www.vishay.com/doc?28705">www.vishay.com/doc?28705</a> |  |  |
| MM Professional    | <a href="http://www.vishay.com/doc?28713">www.vishay.com/doc?28713</a> | <a href="mailto:melf@vishay.com">melf@vishay.com</a>                               |  |
| MMA 0204 HT        | <a href="http://www.vishay.com/doc?28780">www.vishay.com/doc?28780</a> |  |  |
| OMM0102            | <a href="http://www.vishay.com/doc?20003">www.vishay.com/doc?20003</a> |  |  |
| OMM0204            | <a href="http://www.vishay.com/doc?20004">www.vishay.com/doc?20004</a> |  |  |
| OMM0207            | <a href="http://www.vishay.com/doc?20005">www.vishay.com/doc?20005</a> |  |  |
| SFR                | <a href="http://www.vishay.com/doc?28722">www.vishay.com/doc?28722</a> | <a href="mailto:filmresistorsleaded@vishay.com">filmresistorsleaded@vishay.com</a> |  |
| MB/SMA             | <a href="http://www.vishay.com/doc?28766">www.vishay.com/doc?28766</a> |  |  |
| MC VG01            | <a href="http://www.vishay.com/doc?28744">www.vishay.com/doc?28744</a> | <a href="mailto:specialresistors@vishay.com">specialresistors@vishay.com</a>       |  |
| MM VG03            | <a href="http://www.vishay.com/doc?28707">www.vishay.com/doc?28707</a> |  |  |
| MB/SMA VG06        | <a href="http://www.vishay.com/doc?28768">www.vishay.com/doc?28768</a> |  |  |



## VISHAY DRALORIC/BEYSCHLAG

## Resistors Division

**Jumpers - High Current Density in Small Packages**

| Thick Film                |                      |         |         |                                  |                       |                      |
|---------------------------|----------------------|---------|---------|----------------------------------|-----------------------|----------------------|
| Series                    | Product              | Size    |         | Operating Temperature Range (°C) | R <sub>max</sub> (mΩ) | I <sub>max</sub> (A) |
|                           |                      | Inch    | Metric  |                                  |                       |                      |
| Standard                  | CRCW01005 e3         | 01005   | RR0402M | -55 to +155                      | 50                    | 0.5                  |
|                           | CRCW0201 e3          | 0201    | RR0603M |                                  | 50                    | 1.0                  |
|                           | D10/CRCW0402 *       | 0402    | RR1005M |                                  | 20                    | 1.5                  |
|                           | D11/CRCW0603 *       | 0603    | RR1608M |                                  | 20                    | 2.0                  |
|                           | D12/CRCW0805 *       | 0805    | RR2012M |                                  | 20                    | 2.5                  |
|                           | D25/CRCW1206 *       | 1206    | RR3216M |                                  | 20                    | 3.5                  |
|                           | CRCW1210 *           | 1210    | RR3225M |                                  | 20                    | 5.0                  |
|                           | CRCW1218 *           | 1218    | RR3246M |                                  | 20                    | 7.0                  |
|                           | CRCW2010 *           | 2010    | RR5025M |                                  | 20                    | 6.0                  |
| CRCW2512 *                | 2512                 | RR6332M | 20      | 7.0                              |                       |                      |
| Thick Film Sulfur Proof   | RCA0402 *            | 0402    | RR1005M | -55 to +155                      | 20                    | 1.5                  |
|                           | RCA0603 *            | 0603    | RR1608M |                                  | 20                    | 2.0                  |
|                           | RCA0805 *            | 0805    | RR2012M |                                  | 20                    | 2.5                  |
|                           | RCA1206 *            | 1206    | RR3216M |                                  | 20                    | 3.5                  |
|                           | RCA1210 *            | 1210    | RR3225M |                                  | 20                    | 5.0                  |
|                           | RCA1218 *            | 1218    | RR3246M |                                  | 20                    | 7.0                  |
|                           | RCA2010 *            | 2010    | RR5025M |                                  | 20                    | 6.0                  |
|                           | RCA2512 *            | 2512    | RR6332M |                                  | 20                    | 7.0                  |
| High-Power Pulse Proof    | CRCW0402-HP e3       | 0402    | RR1005M | -55 to +155                      | 10                    | 3.0                  |
|                           | CRCW0603-HP e3       | 0603    | RR1608M |                                  | 8                     | 5.0                  |
|                           | CRCW0805-HP e3       | 0805    | RR2012M |                                  | 5                     | 6.0                  |
|                           | CRCW1206-HP e3       | 1206    | RR3216M |                                  | 5                     | 10.0                 |
|                           | CRCW1210-HP e3       | 1210    | RR3225M |                                  | 4                     | 12.0                 |
|                           | CRCW1218-HP e3       | 1218    | RR3246M |                                  | 4                     | 20.0                 |
|                           | CRCW2010-HP e3       | 2010    | RR5025M |                                  | 5                     | 12.0                 |
|                           | CRCW2512-HP e3       | 2512    | RR6332M |                                  | 5                     | 16.0                 |
| Green                     | RCG0402 e3           | 0402    | RR1005M | -55 to +155                      | 20                    | 1.5                  |
|                           | RCG0603 e3           | 0603    | RR1608M |                                  | 20                    | 2.0                  |
|                           | RCG0805 e3           | 0805    | RR2012M |                                  | 20                    | 2.5                  |
|                           | RCG1206 e3           | 1206    | RR3216M |                                  | 20                    | 3.5                  |
| Long Side Termination     | RCL0406 e3           | 0406    | RR1016M | -55 to +155                      | 10                    | 4.0                  |
|                           | RCL0612 e3           | 0612    | RR1632M |                                  | 10                    | 6.0                  |
|                           | RCL1218 e3           | 1218    | RR3246M |                                  | 20                    | 7.0                  |
|                           | RCL1225 e3           | 1225    | RR3263M |                                  | 10                    | 12.0                 |
| Conductive Gluing         | D10-AP               | 0402    | RR1005M | -55 to +155                      | 200                   | 0.5                  |
|                           | D11-AP               | 0603    | RR1608M |                                  | 200                   | 0.7                  |
|                           | D12-AP               | 0805    | RR2012M |                                  | 200                   | 0.8                  |
|                           | D25-AP               | 1206    | RR3216M |                                  | 200                   | 1.0                  |
|                           | CRCW1210-AP          | 1210    | RR3225M |                                  | 200                   | 1.5                  |
|                           | CRCW1218-AP          | 1218    | RR3246M |                                  | 200                   | 2.0                  |
|                           | CRCW2010-AP          | 2010    | RR5025M |                                  | 200                   | 1.8                  |
|                           | CRCW2512-AP          | 2512    | RR6332M |                                  | 200                   | 2.0                  |
| Approved to EN 140401-802 | CRCW0805-EN802 E0 ** | 0805    | RR2012M | -55 to +125                      | 20                    | 1.5                  |
|                           | CRCW1206-EN802 E0 ** | 1206    | RR3216M |                                  | 20                    | 2.0                  |
|                           | D12-EN802 E0 ***     | 0805    | RR2012M |                                  | 20                    | 1.5                  |
|                           | D25-EN802 E0 ***     | 1206    | RR3216M |                                  | 20                    | 2.0                  |

\* Available in both Pb free and Sn/Pb termination versions  
 \*\* Pb-free termination version  
 \*\*\* Sn/Pb termination version



## VISHAY DRALORIC/BEYSCHLAG

## Resistors Division

Jumpers - High Current Density in Small Packages

## Thick Film (cont.)

| Series                  | Product              | Size    |         | Operating Temperature Range (°C) | R <sub>max</sub> (mΩ) | I <sub>max</sub> (A) |
|-------------------------|----------------------|---------|---------|----------------------------------|-----------------------|----------------------|
|                         |                      | Inch    | Metric  |                                  |                       |                      |
| Established Reliability | CRCW0805-EN802 E6 ** | 0805    | RR2012M | -55 to +155                      | 20                    | 1.5                  |
|                         | CRCW1206-EN802 E6 ** | 1206    | RR3216M |                                  | 20                    | 2.0                  |
|                         | D12-EN802 E6 ***     | 0805    | RR2012M |                                  | 20                    | 1.5                  |
|                         | D25-EN802 E6 ***     | 1206    | RR3216M |                                  | 20                    | 2.0                  |
| Chip Array              | CRA04P/S             | Various |         | -55 to +155                      | 50                    | 1.0                  |
|                         | CRA06E/S/P           | Various |         |                                  | 50                    | 1.0                  |
|                         | CRA12E/S             | Various |         |                                  | 50                    | 1.5                  |

\* Available in both Pb-free and Sn/Pb termination versions

\*\* Pb free termination version

\*\*\* Sn/Pb termination version

## Thin Film

| Series                  | Product       | Size |         | Operating Temperature Range (°C) | R <sub>max</sub> (mΩ) | I <sub>max</sub> (A) |
|-------------------------|---------------|------|---------|----------------------------------|-----------------------|----------------------|
|                         |               | Inch | Metric  |                                  |                       |                      |
| Professional            | MCS 0402 AT   | 0402 | RR1005M | -55 to +175                      | 20                    | 0.63                 |
|                         | MCT 0603 AT   | 0603 | RR1608M |                                  | 20                    | 1.0                  |
|                         | MCU 0805 AT   | 0805 | RR2012M |                                  | 20                    | 1.5                  |
|                         | MCA 1206 AT   | 1206 | RR3216M |                                  | 20                    | 2.0                  |
|                         | MCS 0402      | 0402 | RR1005M | -55 to +155                      | 20                    | 0.63                 |
|                         | MCT 0603      | 0603 | RR1608M |                                  | 20                    | 1.0                  |
|                         | MCU 0805      | 0805 | RR2012M |                                  | 20                    | 1.5                  |
|                         | MCA 1206      | 1206 | RR3216M |                                  | 20                    | 2.0                  |
| Established Reliability | MCS 0402 VG01 | 0402 | RR1005M | -55 to +125                      | 20                    | 0.63                 |
|                         | MCT 0603 VG01 | 0603 | RR1608M |                                  | 20                    | 1.0                  |
|                         | MCU 0805 VG01 | 0805 | RR2012M |                                  | 20                    | 1.5                  |
|                         | MCA 1206 VG01 | 1206 | RR3216M |                                  | 20                    | 2.0                  |

## Thin Film

| Series                       | Product       | Size    |      | Operating Temperature Range (°C) | R <sub>max</sub> (mΩ) | I <sub>max</sub> (A) |
|------------------------------|---------------|---------|------|----------------------------------|-----------------------|----------------------|
|                              |               | EN      | DIN  |                                  |                       |                      |
| MELF Professional            | MMU 0102      | RC2211M | 0102 | -55 to +155                      | 10                    | 2.0                  |
|                              | MMA 0204      | RC3715M | 0204 |                                  | 10                    | 3.0                  |
|                              | MMB 0207      | RC6123M | 0207 |                                  | 10                    | 5.0                  |
|                              | OMM0102       | RC2211M | 0102 | -55 to +125                      | 10                    | 2.0                  |
|                              | OMM0204       | RC3715M | 0204 | -55 to +125                      | 10                    | 3.0                  |
|                              | OMM0207       | RC6123M | 0207 | -55 to +155                      | 10                    | 5.0                  |
| MELF High-Temperature        | MMA 0204 HT   | RC3715M | 0204 | -55 to +175                      | 10                    | 3.0                  |
| MELF Established Reliability | MMU 0102 VG03 | RC2211M | 0102 | -55 to +125                      | 10                    | 2.0                  |
|                              | MMA 0204 VG03 | RC3715M | 0204 |                                  | 10                    | 3.0                  |
|                              | MMB 0207 VG03 | RC6123M | 0207 |                                  | 10                    | 5.0                  |



VISHAY DRALORIC/BEYSCHLAG

Resistors Division

Jumpers - High Current Density in Small Packages

| Metal Film   |               |         |      |                                  |                       |                      |
|--------------|---------------|---------|------|----------------------------------|-----------------------|----------------------|
| Series       | Product       | Size    |      | Operating Temperature Range (°C) | R <sub>max</sub> (mΩ) | I <sub>max</sub> (A) |
|              |               | EN      | DIN  |                                  |                       |                      |
| Axial Leaded | SFR16S        | RC3715M | 0204 | -55 to +155                      | 30                    | 3.0                  |
|              | SFR25         | RC6123M | 0207 |                                  | 10                    | 5.0                  |
|              | MBA 0204      | RC3715M | 0204 | -55 to +155                      | 10                    | 3.0                  |
|              | MBA 0207      | RC6123M | 0207 |                                  | 10                    | 5.0                  |
|              | MBA 0204 VG06 | RC3715M | 0204 | -55 to +155                      | 10                    | 3.0                  |
|              | MBA 0207 VG06 | RC6123M | 0207 |                                  | 10                    | 5.0                  |



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 95100 SELB  
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 FAX: +49-9287-70435

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 FAX: +33-4-9337-2726

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