

Axial Vitreous Wirewound Resistors



FEATURES

- Complete welded construction
- Vitreous coating
- Enhanced humidity protection
- TCR 100 ... 180 ppm/K
- Pure tin plating provides compatibility with lead (Pb)-free and lead containing soldering processes
- Compliant to RoHS directive 2002/95/EC



RoHS
COMPLIANT
GREEN
[5-2009]**

| STANDARD ELECTRICAL SPECIFICATIONS | | | | |
|------------------------------------|---|------------------|------------------------------------|----------------------|
| MODEL | POWER RATING <i>P</i> _{40 °C} | LIMITING VOLTAGE | RESISTANCE RANGE (1) | TOLERANCE |
| G202 | 4 W | 200 V | 0.10 Ω to 10 kΩ 0.36 Ω to 10 kΩ | ± 10, ± 5 % ± 2 % |
| G204 | 7 W | 350 V | 0.10 Ω to 39 kΩ | ± 10, ± 5 %, ± 2 % |
| G206 | 13 W | 500 V | 0.15 Ω to 68 kΩ | ± 10, ± 5 %, ± 2 % |
| G207 | 17 W | 650 V | 0.20 Ω to 120 kΩ | ± 10, ± 5 %, ± 2 % |

Note

(1) Resistance value to be selected for ± 10 % tolerance from E12 and for ± 5 % from E24

| PART NUMBER AND PRODUCT DESCRIPTION | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|---|-----------------------|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Part Number: G24071933902J4B000 | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px 5px;">G</td> <td style="padding: 2px 5px;">2</td> <td style="padding: 2px 5px;">4</td> <td style="padding: 2px 5px;">0</td> <td style="padding: 2px 5px;">7</td> <td style="padding: 2px 5px;">1</td> <td style="padding: 2px 5px;">9</td> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">3</td> <td style="padding: 2px 5px;">9</td> <td style="padding: 2px 5px;">0</td> <td style="padding: 2px 5px;">2</td> <td style="padding: 2px 5px;">J</td> <td style="padding: 2px 5px;">4</td> <td style="padding: 2px 5px;">B</td> <td style="padding: 2px 5px;">0</td> <td style="padding: 2px 5px;">0</td> <td style="padding: 2px 5px;">0</td> </tr> </table> | | | | | | G | 2 | 4 | 0 | 7 | 1 | 9 | 3 | 3 | 9 | 0 | 2 | J | 4 | B | 0 | 0 | 0 |
| G | 2 | 4 | 0 | 7 | 1 | 9 | 3 | 3 | 9 | 0 | 2 | J | 4 | B | 0 | 0 | 0 | | | | | | |
| MODEL | TCR/MATERIAL | VALUE | TOLERANCE CODE | PACKAGING CODE | SPECIAL | | | | | | | | | | | | | | | | | | |
| G220414 = G202 G240719 = G204 G260933 = G206 G270947 = G207 | 3 = Class 3 WM 110 100 ... 180 ppm/K | 3 digit value 1 digit multiplier 7 = *10 ⁻³ 8 = *10 ⁻² 9 = *10 ⁻¹ 0 = *10 ⁰ 1 = *10 ¹ 2 = *10 ² 3 = *10 ³ | F = ± 1.0 % G = ± 2.0 % J = ± 5.0 % K = ± 10.0 % | (See Packaging Table) | The 5 digit BV number will be encoded using a 36 character code. This code contains numbers 0...9 and letters A...Z (36 characters total) and allows to encode at least 46 655 five digit BV numbers. 000 = Standard | | | | | | | | | | | | | | | | | | |
| Product Description: G204 39K 5 % AB G73 | | | | | | | | | | | | | | | | | | | | | | | |
| G204 | 39K | 5 % | AB G73 | | | | | | | | | | | | | | | | | | | | |
| MODEL (2) | VALUE (2) | TOLERANCE CODE (2) | PACKAGING DESCRIPTION (3) | | | | | | | | | | | | | | | | | | | | |

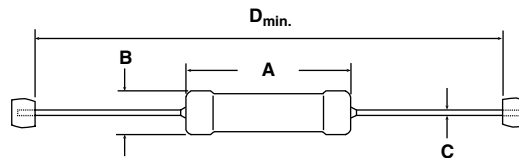
Notes

(2) See "Part Number" above

(3) See "Packaging Table"

** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

| PACKAGING TABLE | | | | | | | | | | |
|-----------------|-----------------------|-----------|----------------|-----------------------|------|----------------|-----------------------|-------|----------------|-----------------------|
| MODEL | TAPE/LEAD LENGTH (mm) | AMMO PACK | | | REEL | | | LOOSE | | |
| | | PCS | PACKAGING CODE | PACKAGING DESCRIPTION | PCS | PACKAGING CODE | PACKAGING DESCRIPTION | PCS | PACKAGING CODE | PACKAGING DESCRIPTION |
| G202 | 53 | 500 | 2C | AC G53 | 1000 | D1 | R1 G53 | | | |
| | 73 | 500 | 4C | AC G73 | 1000 | F1 | R1 G73 | | | |
| G204 | 73 | 250 | 4B | AB G73 | 500 | FC | RC G73 | | | |
| | 88 | 250 | 7B | AB G88 | 500 | IC | RC G88 | | | |
| | | 250 | 8B | AB G88 CL | | | | | | |
| | 98 | | | | | | | | | |
| | | | | | | 200 | LJ | LJ | | |
| G206 | 107 | | | | | | | 100 | LA | LA |
| G207 | 120 | | | | | | | 100 | LA | LA |

DIMENSIONS


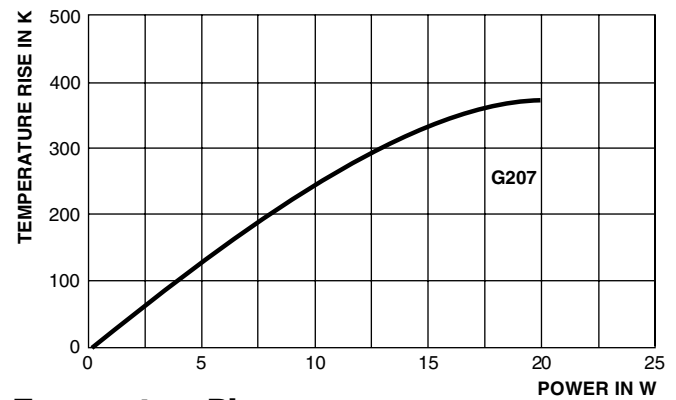
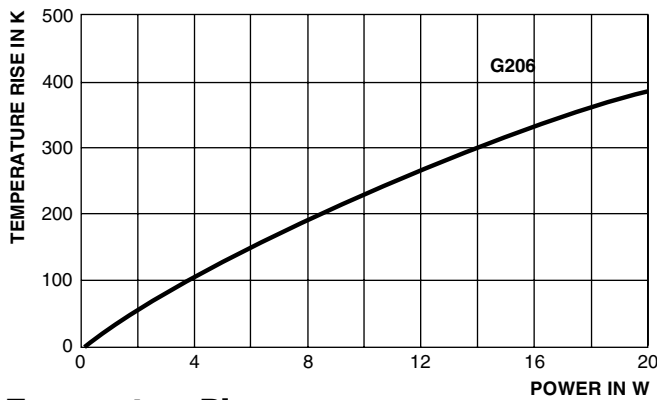
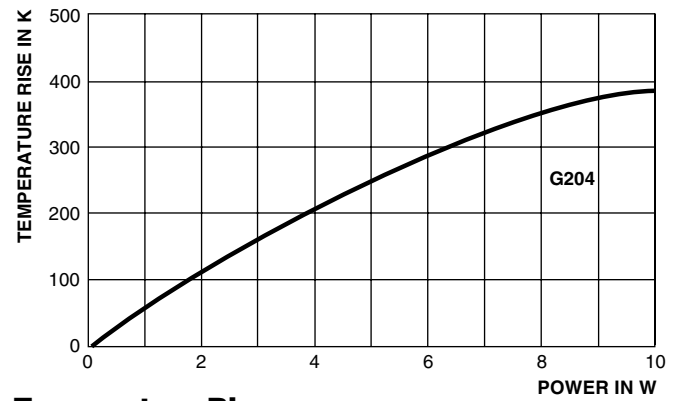
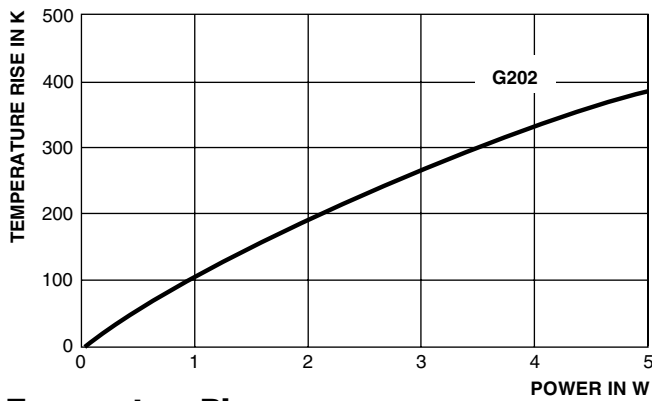
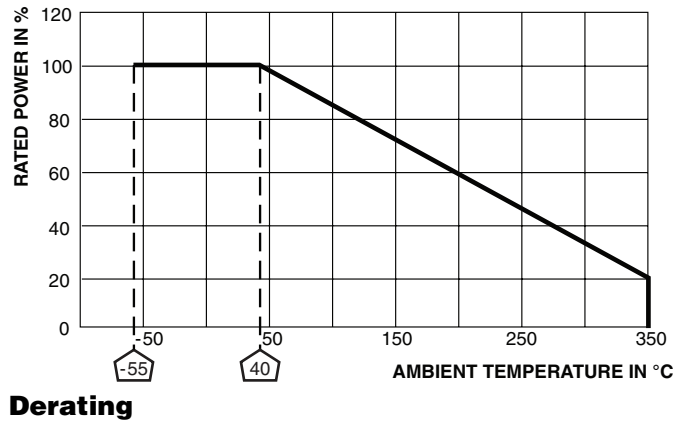
For packaging dimensions see separate packaging dimensions page.

| MODEL | DIMENSIONS in millimeters [inches] | | | | |
|-------|------------------------------------|----------------------------------|------------------|----------------------------|----------|
| | A _{max.} | B _{max.} ⁽¹⁾ | C ⁽²⁾ | D _{min.} | Mass (g) |
| G 202 | 13 [0.512] | 5.7 [0.224] | 0.8 [0.031] | 53 ± 1 [2.087 ± 0.039] | 1 |
| G 204 | 19.3 [0.760] | 8.5 [0.335] | 0.8 [0.031] | 73 ± 1 [2.874 ± 0.039] | 2.2 |
| G 206 | 32.3 [1.272] | 9.8 [0.386] | 0.8 [0.031] | 107 ± 2 [4.213 ± 0.079] | 6.5 |
| G 207 | 49.3 [1.941] | 10.5 [0.413] | 0.8 [0.031] | 120 ± 2 [4.724 ± 0.079] | 10 |

Notes

⁽¹⁾ The body diameter should be increased by 1 mm [0.039"] for ohmic values ≤ 10 Ω

⁽²⁾ C according to IEC 60301





| PERFORMANCE | |
|--|------------------|
| TEST | TEST RESULTS |
| Damp Heat, Steady State (40 ± 2) °C, 56 Days, (93 ± 3) % RH | ± 5 % ΔR |
| Climatic Sequence IEC 60115-1 4.23 | ± 5 % ΔR |
| Load Life P_{40} , 40 °C, 1000 h | ± 5 % ΔR |
| Short Time Overload 5 x Rated Power x 5 s | ± 1 % ΔR |
| Vibration 6 h, 10 Hz to 2000 Hz, 1.5 mm or 196 m/s ² | ± 1 % ΔR |
| Shock IEC 60068-2-27 | ± 1 % ΔR |
| Resistance to Soldering Heat (260 ± 5) °C, (10 ± 1) s | ± 1 % ΔR |



Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.