

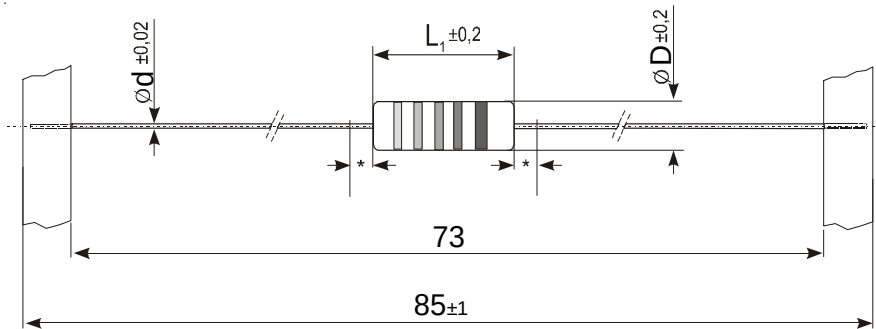
Insulated Wirewound Resistors, moulded  
flame retardant, failsafe



## Specifications

| Type                                                        |                                | BWF237-0                                                               | BWF236-0               |
|-------------------------------------------------------------|--------------------------------|------------------------------------------------------------------------|------------------------|
| Style                                                       |                                | 0411                                                                   | 0614                   |
| Power rating $P_{70}$                                       | W                              | 0,75 ( $P_{50} = 1,0$ )                                                | 1,5 ( $P_{25} = 2,0$ ) |
| Resistance range                                            | $\Omega$                       | 0R1 ... 1K                                                             | 0R1 ... 1K             |
| E-Series                                                    |                                | E 24, E 12                                                             |                        |
| Tolerances                                                  | %                              | $\pm 5$ , $\pm 10$                                                     |                        |
| Temperature coefficient                                     | $10^{-6} \cdot K^{-1}$         | - 400 ... + 1000, see table next page                                  |                        |
| max. cont. work. voltage                                    | $V_{RMS}$                      | $\sqrt{P_{70} \cdot R}$                                                |                        |
| Insulation voltage (1min.)                                  | $V_{RMS}$                      | 700                                                                    | 1000                   |
| Insulation resistance                                       | $\Omega$                       | $> 10^4 M$                                                             |                        |
| Derating linear                                             | $^{\circ}C$                    | 70 ... 175 (0W)                                                        |                        |
| Climatic category                                           |                                | 55/175/56                                                              |                        |
| Temperature range                                           | $^{\circ}C$                    | - 55 ... 175                                                           |                        |
| Thermal resistance                                          | $KW^{-1}$                      | 140                                                                    | 80                     |
| Failure rate<br>(Total, $\vartheta_o$ max., 60% conf. lev.) |                                | appr. 100, depends on value                                            |                        |
| Endurance<br>( $P_{70}$ , 1000h)                            | $\left[\frac{AR}{R}\right] \%$ | $\pm 5,0$ average                                                      | $\pm 10,0$ average     |
| Damp heat, steady state<br>(40 $^{\circ}C$ , 93% r.h., 56d) | $\left[\frac{AR}{R}\right] \%$ | $\pm 2,0$                                                              |                        |
| Climatic sequence                                           | $\left[\frac{AR}{R}\right] \%$ | $\pm 2,0$                                                              |                        |
| Terminal strength                                           | $\left[\frac{AR}{R}\right] \%$ | $\pm 1$                                                                |                        |
| Terminal tensile strength                                   | N                              | 40                                                                     |                        |
| Resistance to soldering heat<br>(260 $^{\circ}C$ , 10s)     | $\left[\frac{AR}{R}\right] \%$ | $\pm 0,2$ typ.                                                         |                        |
| Solderability                                               | s                              | 2,5 Flowtime, solderglobule test, IEC 60068-2-20-T                     |                        |
| Marking                                                     |                                | DIN-IEC-colour code, 5 bands<br>(5th band (blue) for failsafe version) |                        |

Dimensions in mm:



\* 3mm, reduced solderability in this area.

Temperature coefficient

| Typ     | resistance Value | TC<br>* 10 <sup>-6</sup> K <sup>-1</sup> |
|---------|------------------|------------------------------------------|
| BW237-0 | 0R1              | ± 1000                                   |
|         | 0R11 ... 0R18    | ± 600                                    |
|         | 0R2 ... 0R68     | ± 300                                    |
|         | 0R75 ... 1K      | ± 150                                    |
| BW236-0 | 0R1              | ± 1800                                   |
|         | 0R11 ... 0R16    | ± 1000                                   |
|         | 0R18 ... 0R68    | ± 800                                    |
|         | 0R75 ... 1K      | ± 400                                    |

| Type     | L ± 0,2 | ØD ± 0,2 | Ød ± 0,02 | Tape step |
|----------|---------|----------|-----------|-----------|
| BWF237-0 | 9,9     | 3,6      | 0,8       | 5         |
| BWF236-0 | 14,3    | 5,7      | 1,0*      | 10        |

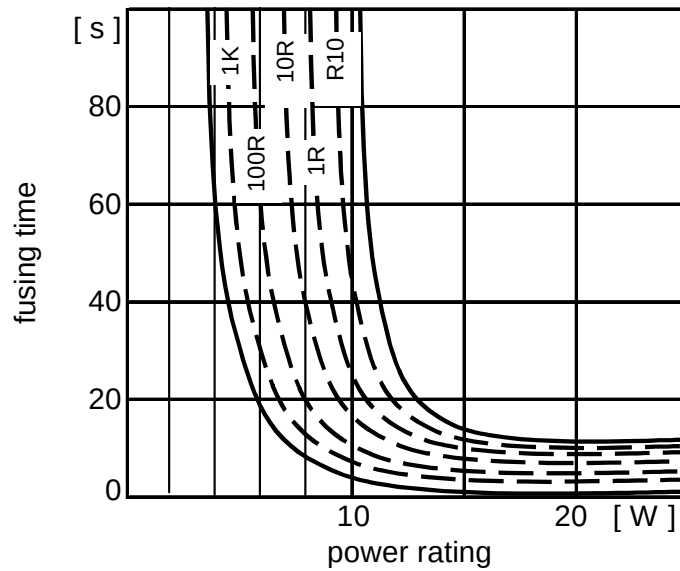
\*Special lead diameter 0,8 mm available, type BWF 236-006

Packaging:

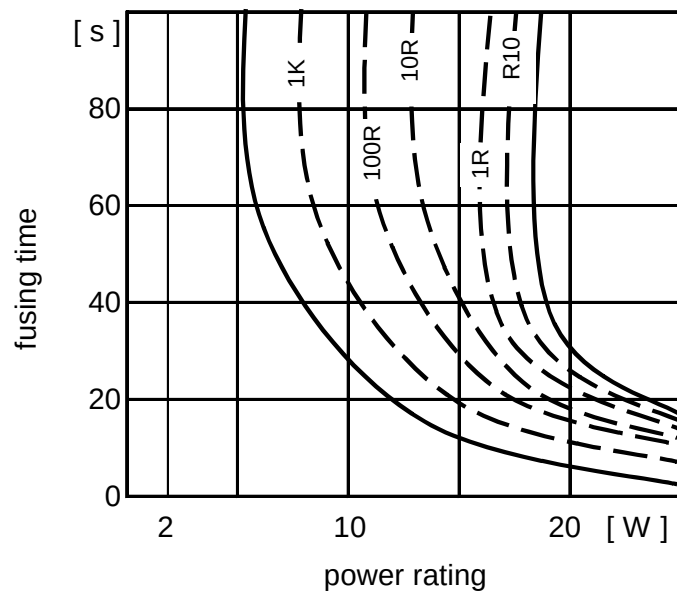
| Type     | Packaging      | Pieces | Pack.Code |
|----------|----------------|--------|-----------|
| BWF236-0 | taped/Ammopack | 1000   | T         |
| BWF237-0 | taped/Ammopack | 1000   | T         |

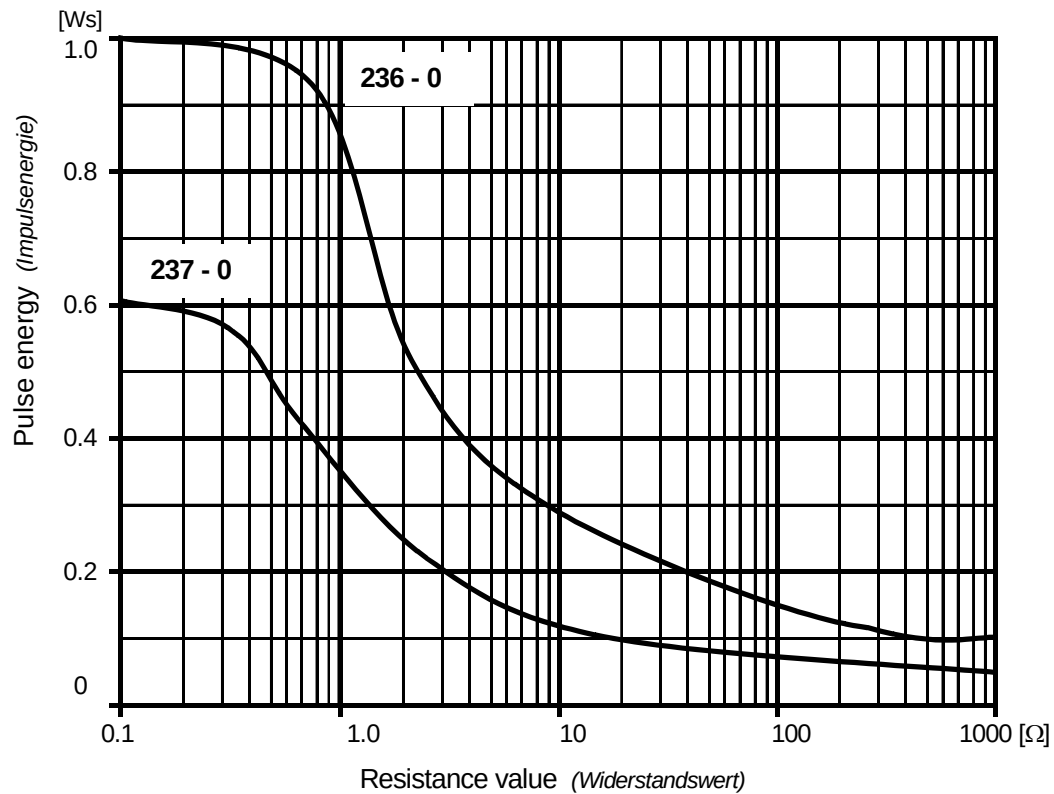
Ordering example: BWF 237-0      5      T      1K  
Type      Tolerance      Pack.-Code      R-Value

Type BWF 237-0



Type BWF 236-0





The curves are expressing the range, where no substantial effects are caused of recurrent pulses.

*(Die Kurven geben den Bereich an, in dem wiederholte Impulse keine merklichen Effekte am Widerstand hervorrufen.)*

A single pulse with a 3 – 5 times higher value will cause the destruction of the resistor!  
*(Ein Einzelimpuls mit 3 – 5 fachem Wert führt zur Zerstörung des Widerstandes!)*