

Power Wirewound Resistors Ceramic case , Vertical



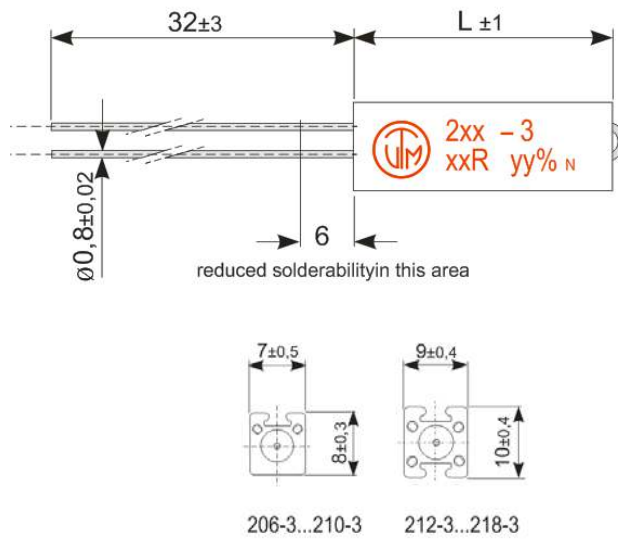
ELECTRICAL SPECIFICATIONS

| Type | | KV206-3 | KV208-3 | KV210-3 | KV212-3 | KV 214-3 | KV216-3 | KV218-3 |
|--|--------------------------------------|--|---------|---------|---------|----------|---------|---------|
| <u>Nominal Power rating</u> P ₇₀ | [W] | 4 | 5 | 7 | 7 | 9 | 11 | 17 |
| <u>Resistance range</u> | Min | * Please check the table below | | | | | | |
| | Max | 9K1 | 15K | 33K | 15K | 33K | 47K | 82K |
| <u>E-Series</u> | | E24 (5[%]), E12 (10[%]) | | | | | | |
| <u>Tolerances</u> | ± [%] | 5, 10 | | | | | | |
| <u>Temperature coefficient</u> | [10 ⁻⁶ *K ⁻¹] | * Depends on the value, please check the table below | | | | | | |
| <u>Temperature range</u> | [°C] | -55 ... +350 | | | | | | |
| <u>Thermal resistance</u> | [KW ⁻¹] | 70 | 56 | 40 | 40 | 31 | 25 | 16 |
| <u>Dielectric withstanding voltage</u> IEC115-1 clause 4.7 (1[min]) | [V] | 2000 | | | | | | |
| <u>Insulation resistance</u> IEC115-1 clause 4.6 | [MΩ] | > 10 ⁴ | | | | | | |
| <u>Max. working voltage</u> | [V] _{RMS} | $\sqrt{P_{70} * R}$ | | | | | | |

PERFORMANCE DATA

| | | |
|--|-------------------------------------|----------------------------|
| <u>Derating linear</u> | | 70...350 (0W) |
| <u>Climatic category</u> | | 55/200/21 |
| <u>Failure Rate</u> (Total, θ _o , max, 60[%] cont. lev.) | [10 ⁻⁹ h ⁻¹] | appr. 100 depends on value |
| <u>Endurance</u> IEC115-1 clause 4.25 (P ₇₀ , @ 70[°C], 1000[h]) | ± [%] | 3,0 |
| <u>Damp heat, steady state</u> IEC115-1 clause 4.24 (40[°C], 93[% r.h.], 56[d]) | ± [%] | 2,0 |
| <u>Climatic sequence</u> IEC115-1 clause 4.23 | ± [%] | 2,0 |
| <u>Terminal strength</u> | ± [%] | 1,0 |
| <u>Terminal Tensile Strength</u> | [N] | 50 |
| <u>Resistance to soldering heat</u> IEC115-1 clause 4.12 (260 ^{±5} [°C], 3,5 ^{±1} [s]) | ± [%] | ± 0,2 |
| <u>Solderability</u> IEC 60068-2-20 (245 ^{±5} [°C], 3 ^{±0,5} [s]) | | Solder bath method |
| <u>Marking</u> IEC60062 | | Printed in clear |

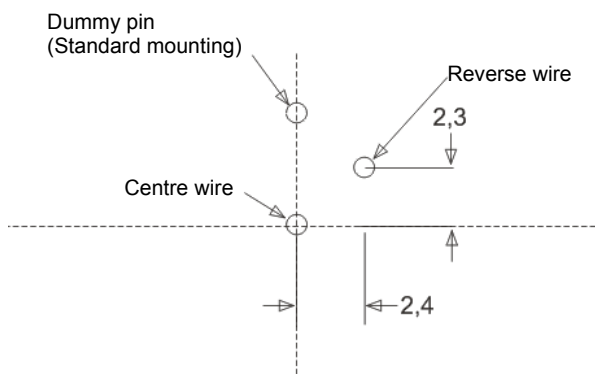
DIMENSIONS [mm]



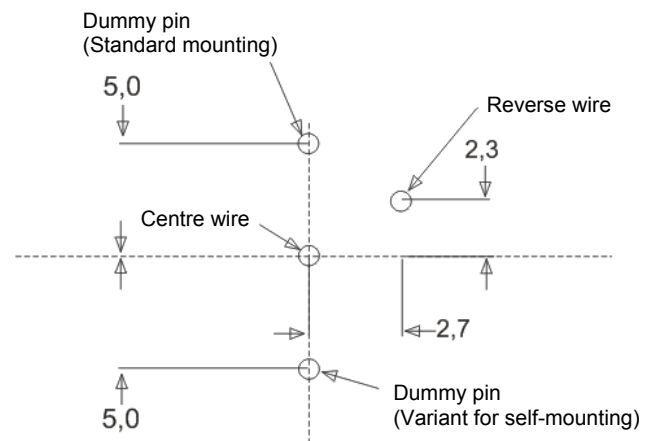
| Type | L ₁ |
|---------|----------------|
| KV206-3 | 20 ±1,0 |
| KV208-3 | 25 ±1,0 |
| KV210-3 | 38 ±1,0 |
| KV212-3 | 25 ±1,0 |
| KV214-3 | 38 ±1,0 |
| KV216-3 | 50 ±1,5 |
| KV218-3 | 75 ±2,0 |

PCB – Layout for series KV

KV206...KV210-3



KV212...KV218-3



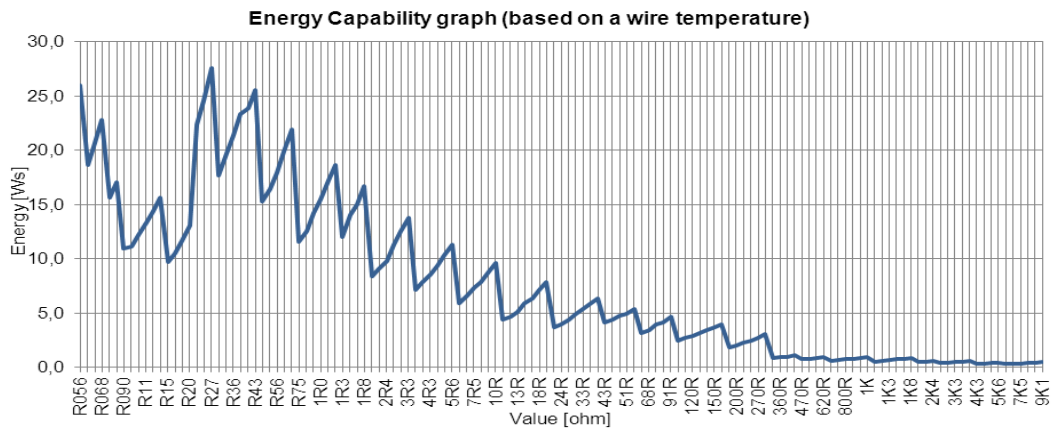
ELECTRICAL CHARACTERISTIC

| Resistance range [minimum] | | |
|----------------------------|-------|------|
| Type | ±10% | ±5% |
| KV206-3 | 0R056 | 0R1 |
| KV208-3 | 0R075 | 0R15 |
| KV210-3 | 0R11 | 0R33 |
| KV212-3 | 0R075 | 0R15 |
| KV214-3 | 0R11 | 0R33 |
| KV216-3 | 0R15 | 0R51 |
| KV218-3 | 0R27 | 0R91 |

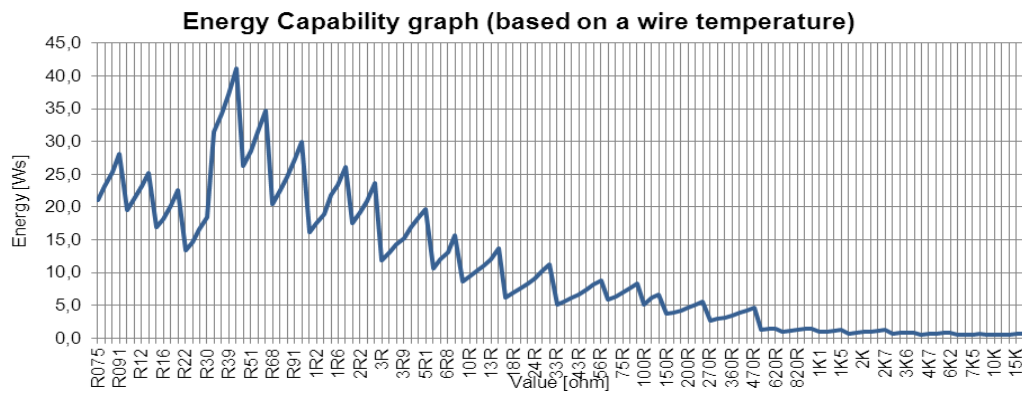
| Temperature coefficient [ppm K ⁻¹] | | | |
|--|-------------|-------------|------------|
| Type | TC +400 ±50 | TC 0 ±40 | TC 0 ±10 |
| KV206-3 | 0R056...0R2 | 0R22...300R | 330R...9K1 |
| KV208-3 | 0R075...0R3 | 0R33...470R | 510R...15K |
| KV210-3 | 0R11...0R68 | 0R75...910R | 1K...33K |
| KV212-3 | 0R075...0R3 | 0R33...470R | 510R...15K |
| KV214-3 | 0R11...0R68 | 0R75...910R | 1K...33K |
| KV216-3 | 0R15...1R | 1R1...1K3 | 1K5...47K |
| KV218-3 | 0R27...1R6 | 1R8...2K4 | 2K7...82K |

ELECTRICAL PERFORMANCE

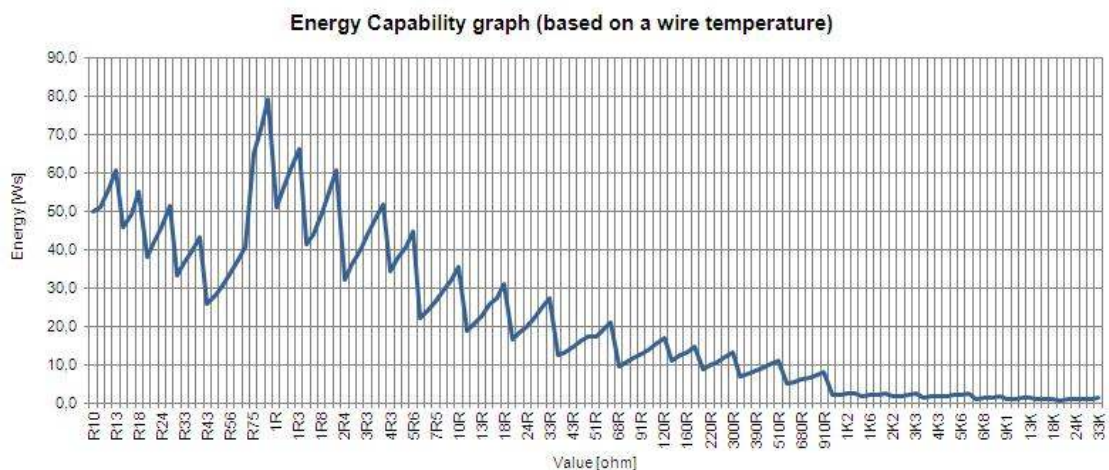
KV206-3



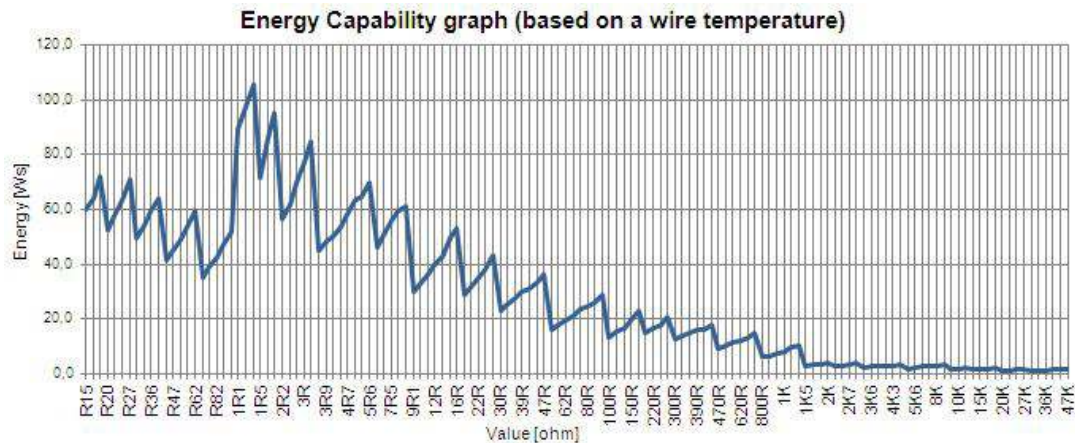
KV208-3 and KV212-3



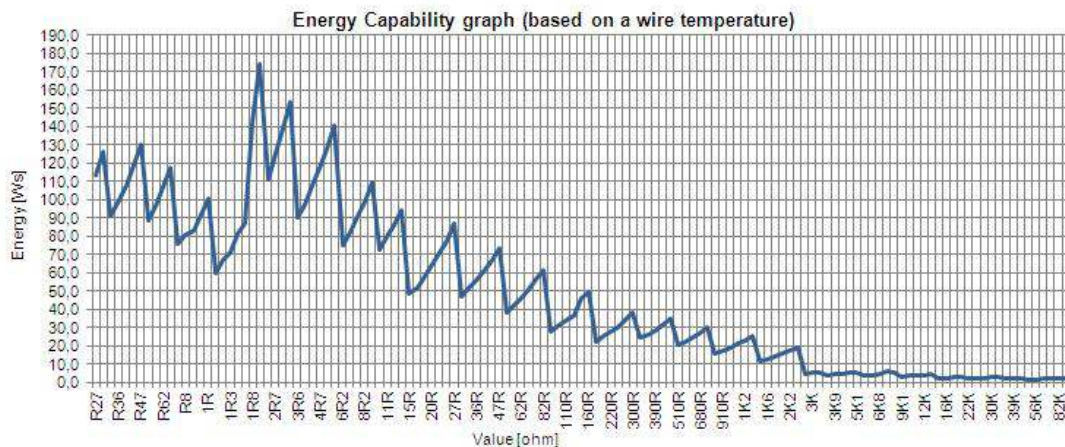
KV210-3 and KV214-3



KV216-3



KV218-3



PACKAGING

The standard packaging for KV in axial type is bulk, dimensions below.



| Type | Packaging | Pieces | Pack. Code |
|---------|-----------|--------|------------|
| KV206-3 | Bulk | 200 | B |
| KV208-3 | | 200 | |
| KV210-3 | | 200 | |
| KV212-3 | | 200 | |
| KV214-3 | | 200 | |
| KV216-3 | | 200 | |
| KV218-3 | | 100 | |

ORDERING EXAMPLE

| | | | |
|----------------|-----------|-----------|-------------|
| KV206-3 | 10 | B | 100R |
| Type | Tolerance | Pack-Code | R-Value |