

## KWV Series Datasheet

Power Wirewound Resistors | Radial | Ceramic case  
Ceramic core

### ORDERING CODE - Example

New SAP Part Nr.:

KWV	10S	J	C	-	RD-	22R	AA
Serie	Power rating	Tol.	Pack-Code	TCR	Forming type	R Value	Special
		J = ±5%	C = Bulk with ceramic core element	- Base on spec.	RD- = Radial		AA = Standard

Historical VTM Part Nr.:

KWV309 - 0	5	B	22R
Type	Tol.	Pack-Code	R Value

### APPLICATIONS

Power & Energy

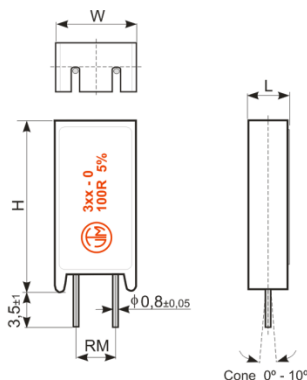
### FEATURES

- Ceramic Core
- Board space saving
- High power to size ratio
- RoHs & REACH Compliant

### ELECTRICAL SPECIFICATIONS

Type		KWV200	KWV300	KWV500	KWV700	KWV10S	KWV10A
Historical Part Number		KWV302 - 0	KWV304 - 0	KWV306 - 0	KWV308 - 0	KWV309 - 0	KWV310 - 0
Nominal Power Rating P <sub>70</sub>	[W]	2,0	3,0	5,0	7,0	10WS	10,0
Resistance Range	[Ω] Min. Max.	OR03	OR015	OR015	OR05	OR03	OR08
		36R	68R	130R	330R	270R	510R
		(Other values upon request)					
E-Series (preferred)		E24 (Other upon request)					
Tolerances	±[%]	J = 5% (Other upon request)					
Temperature Coefficient	±[10 <sup>-6</sup> K <sup>-1</sup> ]	300					
Working Temperature Range	[°C]	-55 ... +155					
Thermal Resistance	[KW <sup>-1</sup> ]	42	28	17	12	8	8
Insulation Resistance IEC60115-1 clause 4.6	[MΩ]	> 10 <sup>4</sup>					
Max. Working Voltage	[V] <sub>RMS</sub>	250	350	350	500	500	500
Dielectric Withstanding Voltage IEC60115-1 clause 4.7 (1[min])	[V] <sub>RMS</sub>	500	700	700	1000	2000	2000

### DIMENSIONS [mm]



New P/Nr. Type	Historical P/N:	H	W	L	RM
KWV200	KWV302 - 0	20,0±1,5	11,0±1,0	7,0±1,0	5,0±1,0
KWV300	KWV304 - 0	25,0±1,5	12,0±1,0	8,0±1,0	5,0±1,0
KWV500	KWV306 - 0	25,0±1,5	13,0±1,0	9,0±1,0	5,0±1,0
KWV700	KWV308 - 0	39,0±1,5	13,0±1,0	9,0±1,0	5,0±1,0
KWV10S	KWV309 - 0	35,0±1,5	16,0±1,0	12,0±1,0	7,5±1,0
KWV10A	KWV310 - 0	51,0±1,5	13,0±1,0	9,0±1,0	5,0±1,0

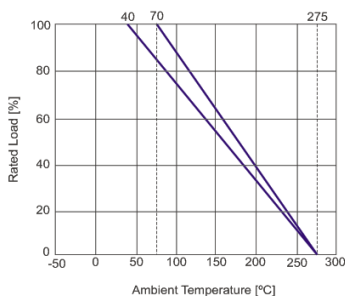
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## PERFORMANCE DATA

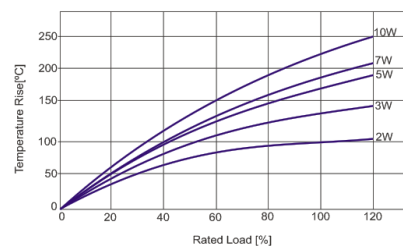
Type		KWV200	KWV300	KWV500	KWV700	KWV10S	KWV10A	
Historical Part Number		KWV302-0	KWV304-0	KWV306-0	KWV308-0	KWV309-0	KWV310-0	
Temperature Cycling <i>IEC60115-1 clause 4.19</i> (-55 ~ +155[°C], 3[ <i>min</i> ] each, 5 cycles)	±[%]	2						
Periodic Electric Overload <i>IEC60115-1 clause 4.39</i>	±[%]	5						
Endurance <i>IEC60115-1 clause 4.25</i> ( <i>P<sub>70</sub></i> , @ 70[°C], 1000[h])	±[%]	5						
Damp Heat, Steady State <i>IEC60115-1 clause 4.24</i> (40[°C], 93[% r.h.], 56[d])	±[%]	5						
Resistance to Soldering Heat <i>IEC60115-1 clause 4.18</i> (260 <sup>±5</sup> [°C], 10 <sup>±1</sup> [s])	±[%]	1						
Robustness of terminations <i>IEC115-1 clause 4.16</i>	[N]	≥ 24.5						
Resistance to solvents of Marking <i>IEC60115-1 clause 4.30</i> (5 <sup>±0.5</sup> [ <i>min.</i> ], with ultrasonic)	±[%]	No deterioration of coatings and markings						
Solderability <i>IEC60068-2-20</i> (245 <sup>±5</sup> [°C] 3 <sup>±0.5</sup> [s])		Solder bath method (> 95% coverage)						
Marking <i>IEC60062</i>		Printed in clear						

## DERATING CURVE & TEMPERATURE RISE

Derating Curve



Temperature Rise



## PACKAGING

The standard packaging for KWV in radial type is bulk, dimensions below.



New P/Nr. Type	Historical P/N:	Pieces	Pack Code	Forming Type
KWV200	KWV302-0	1600	C = Bulk with ceramic core element	RD- = Radial
KWV300	KWV304-0	1000		
KWV500	KWV306-0	1000		
KWV700	KWV308-0	700		
KWV10S	KWV309-0	500		
KWV10A	KWV310-0	500		