

## KWV Series Datasheet

Power Wirewound Resistors | Radial | Ceramic case  
Fiberglass core

### ORDERING CODE-Example

New SAP Part Nr.:

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

Historical VTM Part Nr.:

KWV309-3	5	B	22R
Type	Tol.	Pack-Code	R Value

### APPLICATIONS

- Automotive
- Alternative Energy
- Home Appliances
- Charger
- Power Supply
- Industrial

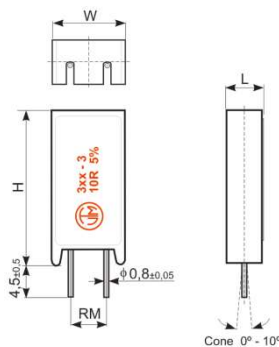
### FEATURES

- Fiberglass Core , Pulse version available
- Board space saving
- Excelent power Vs size ratio
- RoHs and REACH Compliant

### ELECTRICAL SPECIFICATIONS

Type		KWV200	KWV300	KWV500	KWV700	KWV10S	KWV10A
Historical Part Number		KWV302-3	KWV304-3	KWV306-3	KWV308-3	KWV309-3	KWV310-3
Nominal Power Rating P <sub>70</sub>	[W]	2,0	3,0	5,0	7,0	10WS	10,0
Resistance Range	[Ω] Min. Max.	0R1	0R1	0R1	0R1	0R1	0R1
		1K	4K7	4K7	10K	4K7	16K
		(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> ]	- 80 ... + 500 (depends on value)					
Working Temperature Range	[°C]	-55 ... +275					
Thermal Resistance	[KW <sup>-1</sup> ]	102	68	41	30	20	20
Insulation Resistance IEC60115-1 clause 4.6	[MΩ]	> 10 <sup>4</sup>					
Max. Working Voltage	[V] <sub>RMS</sub>	$\sqrt{P_{70} \cdot R}$					
Dielectric Withstanding Voltage IEC60115-1 clause 4.7 (1[min])	[V] <sub>RMS</sub>	2000					

### DIMENSIONS [mm]



New P/Nr. Type	Historical P/N:	H ±1,0	W ±1,0	L ±1,0	RM ±1,0
KWV200	KWV302-3	20,5	11,0	7,0	5,0
KWV300	KWV304-3	25,0	12,0	8,0	5,0
KWV500	KWV306-3	26,0	13,0	9,0	5,0
KWV700	KWV308-3	39,0	13,0	9,5	5,0
KWV10S	KWV309-3	35,0	16,0	12,0	7,5
KWV10A	KWV310-3	51,0	13,0	9,5	5,0

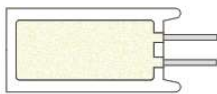
# KWV Series Datasheet

## PERFORMANCE DATA

Type		KWV200	KWV300	KWV500	KWV700	KWV10S	KWV10A
Historical Part Number		KWV302 – 3	KWV304 – 3	KWV306 – 3	KWV308 – 3	KWV309 – 3	KWV310 – 3
Derating Linear	[°C]	70...275 (0W)					
Climatic Category		55/200/21					
Failure Rate <i>(Total, <math>\vartheta_{\nu}</math>, max, 60[%] cont. lev.)</i>	[10 <sup>-9</sup> h <sup>-1</sup> ]	appr. 100 depends on value					
Endurance <i>IEC60115-1 clause 4.25 (<math>P_{70}</math>, @ 70[°C], 1000[h])</i>	±[%]	3,0					
Damp Heat, Steady State <i>IEC60115-1 clause 4.24 (40[°C], 93[% r.h.], 56[d])</i>	±[%]	2,0					
Resistance to Soldering Heat <i>IEC60115-1 clause 4.18 (260<sup>±5</sup>[°C], 10<sup>±1</sup>[s])</i>	±[%]	2,0					
Terminal Strength	±[%]	0,5					
Solderability <i>IEC60068-2-20 (245<sup>±5</sup>[°C] 3<sup>±0,5</sup>[s])</i>		Solder bath method (> 95% coverage)					
Marking <i>IEC60062</i>		Printed in clear					

## PACKAGING

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



New P/Nr. Type	Historical P/N:	SPQ	Pack Code	Forming Type
KWV200	KWV302 – 3	1600	F = Bulk with Fiberglass element	RD- = Radial
KWV300	KWV304 – 3	1000		
KWV500	KWV306 – 3	1000		
KWV700	KWV308 – 3	700		
KWV10S	KWV309 – 3	500		
KWV10A	KWV310 – 3	500		