KWV Series Datasheet

Power Resistors | Radial | Ceramic case
Metal Oxide Film Element

ORDERING CODE - Example

New SAP Part Nr.:

KWV	500	J	M	-	RD-	82K	Y0
Serie	* Power rating	Tol.	Pack-Code	TCR	Forming type	R Value	Special
		J = ±5%	**M** = Bulk with Metal Oxide Element	- Base on spec.	**RD-** = Radial		

Historical VTM Part Nr.:

KWV306 – 5	5	B	82K
Type	Tol.	Pack-Code	R Value

APPLICATIONS

Power & Energy

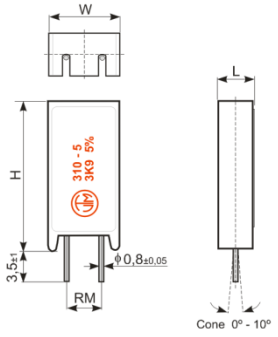
FEATURES

Heat and flame resistant, Insulated
High resistance value
RoHs & REACH Compliant

ELECTRICAL SPECIFICATIONS

Type		KWV200	KWV300	KWV500	KWV700	KWV10S	KWV10A
Historical Part Number		KWV302 – 5	KWV304 – 5	KWV306 – 5	KWV308 – 5	KWV309 – 5	KWV310 – 5
Nominal Power *P_{40}	[W]	2,3	3,0	5,0	7,0	10WS	10,0
Rating P_{70}		2,0	2,6	4,4	6,1	8,7	8,7
Resistance Range	[Ω] Min.	39R	75R	150R	360R	300R	560R
	Max.	1M	1M	1M	1M	1M	1M
		(Other values upon request)					
E-Series (preferred)		E24 (Other upon request)					
Tolerances	±[%]	J = 5% (Other upon request)					
Temperature Coefficient	±[10^{-6} K^{-1}]	300					
Working Temperature Range	[ºC]	-55 … +275					
Thermal Resistance	[KW^{-1}]	102	68	41	30	20	20
Insulation Resistance IEC60115-1 clause 4.6	[MΩ]	> 10^4					
Max. Working Voltage	$[V]_{RMS}$	250	350	350	500	500	500
Dielectric Withstanding Voltage IEC60115-1 clause 4.7 (1[min])	$[V]_{RMS}$	500	700	700	1000	1000	1000

DIMENSIONS [mm]



New P/Nr. Type	*Historical P/N:*	H ±1,5	W ±1,0	L ±1,0	RM +2,0 -1,0
KWV200	KWV302 – 5	**20,0**	**11,0**	**7,0**	**5,0**
KWV300	KWV304 – 5	**25,0**	**12,0**	**8,0**	**5,0**
KWV500	KWV306 – 5	**25,0**	**13,0**	**9,0**	**5,0**
KWV700	KWV308 – 5	**39,0**	**13,0**	**9,0**	**5,0**
KWV10S	KWV309 – 5	**35,0**	**16,0**	**12,0**	**7,5**
KWV10A	KWV310 – 5	**51,0**	**13,0**	**9,0**	**5,0**

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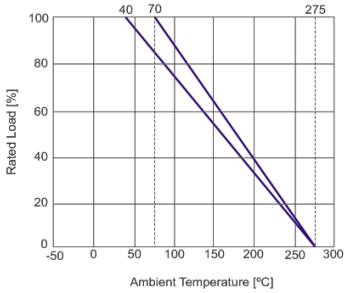
KWV Series Datasheet

PERFORMANCE DATA

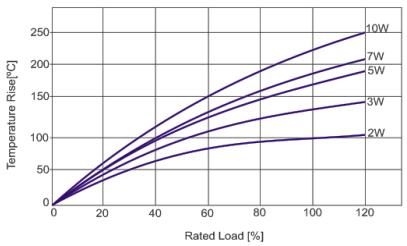
Type		KWV200	KWV300	KWV500	KWV700	KWV10S	KWV10A
Historical Part Number		KWV302 – 5	KWV304 – 5	KWV306 – 5	KWV308 – 5	KWV309 – 5	KWV310 – 5
Derating Linear	[ºC]	70…275 (0W)					
Climatic Category		55/155/21					
Endurance *IEC60115-1 clause 4.25* *(P_{70} @ 70[°C], 1000[h])*	±[%]	5,0					
Damp Heat, Steady State *IEC60115-1 clause 4.24* *(40[°C], 93[% r.h.], 56[d])*	±[%]	5,0					
Climatic Sequence *IEC60115-1 clause 4.23*	±[%]	5,0					
Resistance to Soldering Heat *IEC60115-1 clause 4.18* *($260^{\pm5}$[°C], $10^{\pm1}$[s])*	±[%]	1,0					
Terminal Strength	±[%]	1,0					
Solderability *IEC60068-2-20* *($235^{\pm5}$[ºC] $3^{\pm0,5}$[s])*		Solder bath method (> 95% coverage)					
Marking *IEC60062*		Printed in clear					

DERATING CURVE & TEMPERATURE RISE

Derating Curve

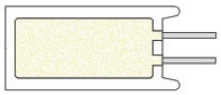


Temperature Rise



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 – 5	1600	**M** = Bulk with Metal Oxide element	**RD-** = Radial
KWV300	KWV304 – 5	1000		
KWV500	KWV306 – 5	1000		
KWV700	KWV308 – 5	700		
KWV10S	KWV309 – 5	500		
KWV10A	KWV310 – 5	500		

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