

KVV Series Datasheet

Power Non-Inductive Resistors | Radial | Flat wire
Ceramic core

ORDERING CODE - Example

New SAP Part Nr.:

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

Historical VTM Part Nr.:

KWV309 - 2	5	B	22R
Type	Tol.	Pack-Code	R Value

APPLICATIONS



Power & Energy

FEATURES

Non-Inductive Style

Board space saving

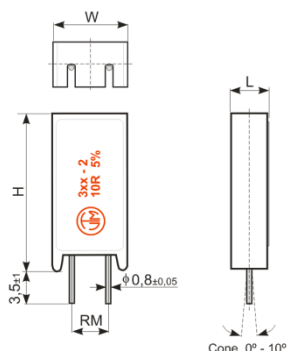
High power to size ratio

RoHs & REACH Compliant

ELECTRICAL SPECIFICATIONS

Type		KWV200	KWV300	KWV500	KWV700	KWV10S	KWV10A
Historical Part Number		KWV302 - 2	KWV304 - 2	KWV306 - 2	KWV308 - 2	KWV309 - 2	KWV310 - 2
Nominal Power Rating P ₇₀	[W]	2,0	3,0	5,0	7,0	10WS	10,0
Resistance Range	[Ω] Min. Max.	0R08	0R033	0R15	0R25	0R12	0R12
		10R	30R	65R	100R	50R	100R
		(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	[°C]	-55 ... +155					
Thermal Resistance	[KW ⁻¹]	42	28	17	12	8	8
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 - 2	20,0	11,0	7,0	5,0
KWV300	KWV304 - 2	25,0	12,0	8,0	5,0
KWV500	KWV306 - 2	25,0	13,0	9,0	5,0
KWV700	KWV308 - 2	39,0	13,0	9,0	5,0
KWV10S	KWV309 - 2	35,0	16,0	12,0	7,5
KWV10A	KWV310 - 2	51,0	13,0	9,0	5,0

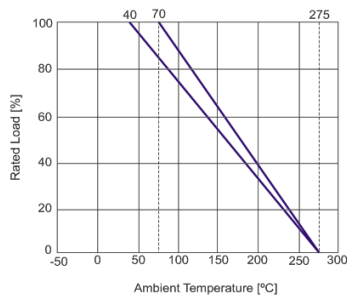
KWV Series Datasheet

PERFORMANCE DATA

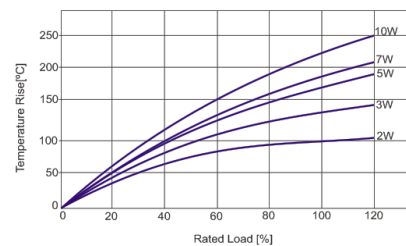
Type		KWV200	KWV300	KWV500	KWV700	KWV10S	KWV10A
Historical Part Number		KWV302 – 2	KWV304 – 2	KWV306 – 2	KWV308 – 2	KWV309 – 2	KWV310 – 2
Temperature Cycling <i>IEC60115-1 clause 4.19</i> (-55 ~ +155[°C], 3[min] each, 5 cycles)	±[%]	2					
Periodic Electric Overload <i>IEC60115-1 clause 4.39</i>	±[%]	5					
Endurance <i>IEC60115-1 clause 4.25</i> (P_{70} , @ 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 ^{±5} [°C], 10 ^{±1} [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 ^{±0.5} [min.], with ultrasonic)	±[%]	No deterioration of coatings and markings					
Solderability <i>IEC60068-2-20</i> (245 ^{±5} [°C] 3 ^{±0.5} [s])		Solder bath method (> 95% coverage)					
Marking <i>IEC60062</i>		Printed in clear					

DERATING CURVE & TEMPERATURE RISE

Derating Curve

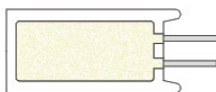


Temperature Rise



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 – 2	1600	N = Bulk with Non-Inductive element	RD- = Radial
KWV300	KWV304 – 2	1400		
KWV500	KWV306 – 2	1000		
KWV700	KWV308 – 2	700		
KWV10S	KWV309 – 2	500		
KWV10A	KWV310 – 2	500		