



KWP Series Datasheet

Power Film Resistors | Radial | Metal Oxide Element | Ceramic case

ORDERING CODE - Example

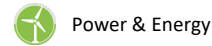
New SAP Part Nr.:

KWP	11A	J	M	-	RD-	560R	AA
Serie	* Power rating	Tol.	Pack-Code	TCR	Forming type	R Value	Special
		J = ±5% K = ±10%	M = Bulk with Metaloxide element	- Base on spec.	RD- = Radial		

Historical VTM Part Nr.:

KWP336 - 1	5	B	560R
Type	Tol.	Pack-Code	R Value

APPLICATIONS



Power & Energy

FEATURES

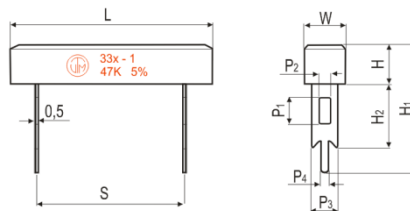
- PCB pluggable style
- Pulse version available
- RoHs and REACH Compliant

ELECTRICAL SPECIFICATIONS

Type		KWP370	KWP600	KWP800	KWP11A	KWP15A	KWP20A
Historical Part Number		KWP330 - 1	KWP332 - 1	KWP333 - 1	KWP336 - 1	KWP337 - 1	KWP339 - 1
Nominal Power Rating	* P ₂₅ P ₄₀	3,7	6,0	8,0	11,0	15,0	20,0
Resistance Range	[W]	3,4	5,0	7,0	10,0	13,0	18,0
	[Ω] Min. Max.	150R 1M	220R 1M	300R 1M	470R 1M	750R 1M	820R 1M
(Other values upon request)							
E-Series (preferred)		E24 (Other upon request)					
Tolerances	±[%]	J = 5% ; K = 10%					
Temperature Coefficient	±[10 ⁻⁶ K ⁻¹]	300					
Working Temperature Range	[°C]	-55 ... +155					
Thermal Resistance	[KW ⁻¹]	41	23	16	12	9	5
Insulation Resistance IEC60115-1 clause 4.6	[MΩ]	> 10 ⁴					
Max. Working Voltage	[V] _{RMS}	250	350	500			
Dielectric Withstanding Voltage IEC60115-1 clause 4.7 (1[min])	[V] _{RMS}	500	700	1000			

DIMENSIONS [mm]

Below or over the "S" dimension on request



New P/Nr. Type	Historical P/N:	L	H	W	S	H ₁	H ₂	P ₁	P ₂	P ₃	P ₄
KWP370	KWP330 - 1	24,0±1,5	9,0±1,0	9,0±1,0	10,0±1,0	24,0±1,0	9,5±1,0	4,0±0,2	2,0±0,2	5,0±0,2	1,4±0,1
KWP600	KWP332 - 1	28,0±1,5	10,0±1,0	10,0±1,0	15,0±1,5	25,0±1,5	10,0±1,0	4,0±0,2	2,0±0,2	5,0±0,2	1,5±0,2
KWP800	KWP333 - 1	35,0±1,5	10,0±1,0	10,0±1,0	22,5±1,5	25,0±1,5	10,0±1,0	4,0±0,2	2,0±0,2	5,0±0,2	1,5±0,2
KWP11A	KWP336 - 1	48,0±1,5	9,5±1,0	10,0±1,0	32,0±1,5	25,0±1,5	10,5±1,0	4,0±0,2	2,0±0,2	5,0±0,2	1,5±0,2
KWP15A	KWP337 - 1	48,0±1,5	12,5±1,0	13,0±1,0	32,0±1,5	35,0±1,5	15,0±1,5	7,0±0,2	4,0±0,2	10,0±0,2	3,0±0,2
KWP20A	KWP339 - 1	63,0±1,5	12,5±1,0	12,5±1,0	42,5±1,5	35,0±1,5	15,0±1,5	7,0±0,2	4,0±0,2	10,0±0,2	3,0±0,2

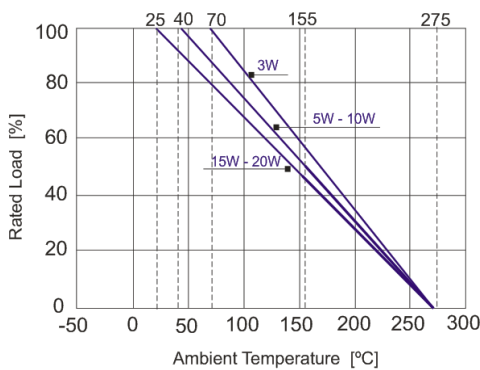
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PERFORMANCE DATA

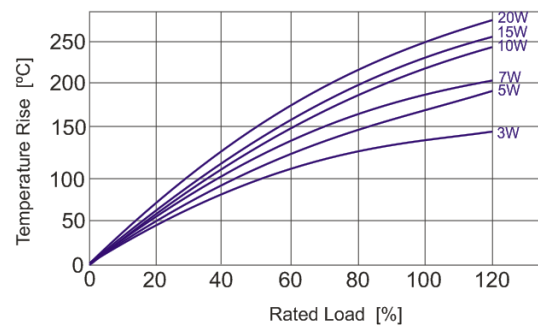
Type		KWP370	KWP600	KWP800	KWP11A	KWP15A	KWP20A
Historical Part Number		KWP330 - 1	KWP332 - 1	KWP333 - 1	KWP336 - 1	KWP337 - 1	KWP339 - 1
Derating Linear	[°C]	40...155 (0W)					
Climatic Category		55/155/21					
Failure Rate <i>(Total, ϑ_{ρ}, max, 60[%] cont. lev.)</i>	$[10^{-9} \text{ h}^{-1}]$	appr. 100 depends on value					
Endurance <i>IEC60115-1 clause 4.25 (P_{rv} @ 70[°C], 1000[h])</i>	±[%]	5					
Damp Heat, Steady State <i>IEC60115-1 clause 4.24 (40[°C], 93[% r.h.], 56[d])</i>	±[%]	5					
Resistance to Soldering Heat <i>IEC60115-1 clause 4.18 (260^{±5}[°C], 10^{±1}[s])</i>	±[%]	1					
Solderability <i>IEC60068-2-20 (245^{±5}[°C] 3^{±0.5}[s])</i>		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 KWP in radial type is bulk, dimensions below.



New P/Nr. Type	Historical P/N:	Pieces	Pack Code	Forming Type
KWP370	KWP330 - 1	150	M = Bulk with Metaloxide element	RD- = Radial
KWP600	KWP332 - 1	150		
KWP800	KWP333 - 1	150		
KWP11A	KWP336 - 1	150		
KWP15A	KWP337 - 1	50		
KWP20A	KWP339 - 1	50		