

KWP Series Datasheet

(Not for new developments, use for new developments our KWP-1)

Power Film Resistors | Radial | Metox Element | ceramic case

ORDERING CODE-Example

New SAP Part Nr.:

KWP	700	J	M	-	RD-	18K	SL
Serie	* Power rating	Tol.	Pack-Code	TCR	Forming type	R Value	Special
		J = ±5%	M = Bulk with Metaloxide element	- Base on spec.	RD- = Radial		SP = 1 Pin Short SL = 1 Pin Long DL = 2 Pin Long

Historical VTM Part Nr.:

KWP333 – 303	5	B	18K
Type	Tol.	Pack-Code	R Value
KWP333 – 503	5	B	18K
Type	Tol.	Pack-Code	R Value
KWP333 – 703	5	B	18K
Type	Tol.	Pack-Code	R Value

APPLICATIONS

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

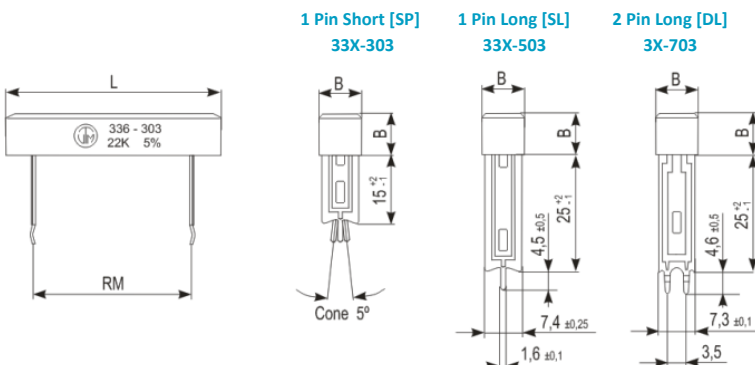
FEATURES

RoHS & REACH Compliant

ELECTRICAL SPECIFICATIONS

Type		KWP300	KWP400	KWP500	KWP700	KWP900	KWP10A
Historical Part Number	1 Pin Short	KWP330 – 303	KWP331 – 303	KWP332 – 303	KWP333 – 303	KWP334 – 303	KWP336 – 303
	1 Pin Long	KWP330 – 503	KWP331 – 503	KWP332 – 503	KWP333 – 503	KWP334 – 503	KWP336 – 503
	2 Pin Long	KWP330 – 703	KWP331 – 703	KWP332 – 703	KWP333 – 703	KWP334 – 703	KWP336 – 703
Nominal Power Rating	* P ₂₅	3,0	4,0	5,0	7,0	9,0	10,0
	P ₇₀	2,5	3,3	4,1	5,7	7,4	8,2
Resistance Range	Min.	390R	680R	680R	1K	1K	1K
	Max.	100K	100K	100K	100K	100K	100K
E-Series (preferred)		(Other values upon request)					
Tolerances	±[%]	E24 = 5% (Other upon request)					
Temperature Coefficient	±[10 ⁻⁶ K ⁻¹]	J = 5% (Other upon request)					
Working Temperature Range	[°C]	-55 ... +235					
Thermal Resistance	[KW ⁻¹]	82	62	50	36	28	25
Insulation Resistance IEC60115-1 clause 4.6	[MΩ]	> 10 ⁴					
Max. Working Voltage	[V] _{RMS}	350			500		
Dielectric Withstanding Voltage IEC60115-1 clause 4.7 (1[min])	[V] _{RMS}	2000					

DIMENSIONS [mm]



New P/Nr. Type	Historical P/N:	L ±1,5	B ±0,5	RM ±1,5
KWP300	KWP330 – 303/503/703	23,0	9,8	10,0
KWP400	KWP331 – 303/503/703	25,0	9,8	12,5
KWP500	KWP332 – 303/503/703	28,0	9,8	15,0
KWP700	KWP333 – 303/503/703	35,0	9,8	22,5
KWP900	KWP334 – 303/503/703	43,0	9,8	32,5
KWP10A	KWP336 – 303/503/703	48,0	9,8	35,0

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PERFORMANCE DATA

Type		KWP300	KWP400	KWP500	KWP700	KWP900	KWP10A
Historical Part Number	1 Pin Short	KWP330 – 303	KWP331 – 303	KWP332 – 303	KWP333 – 303	KWP334 – 303	KWP336 – 303
	1 Pin Long	KWP330 – 503	KWP331 – 503	KWP332 – 503	KWP333 – 503	KWP334 – 503	KWP336 – 503
	2 Pin Long	KWP330 – 703	KWP331 – 703	KWP332 – 703	KWP333 – 703	KWP334 – 703	KWP336 – 703
Derating Linear	[°C]	70...235 (0W)					
Climatic Category		55/155/21					
Failure Rate <i>(Total, ϑ_{vj}, max, 60[%] cont. lev.)</i>	$[10^{-9} \text{ h}^{-1}]$	1					
Endurance <i>IEC60115-1 clause 4.25 (P_{70} @ 70[°C], 1000[h])</i>	$\pm[\%]$	5					
Damp Heat, Steady State <i>IEC60115-1 clause 4.24 (40[°C], 93[% r.h.], 56[d])</i>	$\pm[\%]$	5					
Resistance to Soldering Heat <i>IEC60115-1 clause 4.18 (260^{±5}[°C], 10^{±1}[s])</i>	$\pm[\%]$	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					

PACKAGING

The standard packaging for KWP type is bulk, dimensions below.



New P/Nr. Type	Special	Historical P/N:	Pieces	Pack Code	Forming Type
KWP300	SP ; SL ; DL	KWP330 – 303 ; 503 ; 703	144	M = Bulk with Metaloxide element	RD- = Radial
KWP400	SP ; SL ; DL	KWP331 – 303 ; 503 ; 703	100		
KWP500	SP	KWP332 – 303	112		
	SL ; DL	KWP332 – 503 ; 703	128		
KWP700	SP	KWP333 – 303	120		
	SL ; DL	KWP333 – 503 ; 703	100		
KWP900	SP	KWP334 – 303	150		
	SL ; DL	KWP334 – 503 ; 703	105		
KWP10A	SP	KWP336 – 303	150		
	SL	KWP336 – 503	120		
	DL	KWP336 – 703	100		