



KPS Series Datasheet

Power Wirewound Resistors | Radial | Fiber glass core | coated

ORDERING CODE - Example

New SAP Part Nr.:

KPS	400	J	B	-	RD-	100R	L0
Serie	Power rating	Tol.	Pack-Code	TCR	Forming type	R Value	Special
		J = ±5% K = ±10%	B = Bulk	- Base on spec.	RD- Radial		L0 = Pin long (old -0) S0 = Pin short (old -1)

Historical VTM Part Nr.:

KP292 - 0	5	B	100R
Type	Tol.	Pack-Code	R Value
	±5% = J ±10% = K	B = Bulk	

KP292 - 1	5	B	100R
Type	Tol.	Pack-Code	R Value
	±5% = J ±10% = K	B = Bulk	

APPLICATIONS



Industrial



Power & Energy

FEATURES

PCB pluggable style

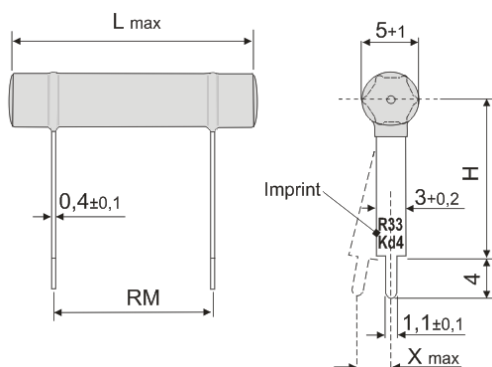
Pulse version available

RoHS & REACH Compliant

ELECTRICAL SPECIFICATIONS

Type			KPS200	KPS400	KPS500	KPS650	KPS800
Historical Part Number		Pin long (L0)	KP290 - 0	KP292 - 0	KP294 - 0	KP296 - 0	KP298 - 0
		Pin short (S0)	KP290 - 1	KP292 - 1	KP294 - 1	KP296 - 1	KP298 - 1
Nominal Power Rating	P ₇₀	[W]	2,0	4,0	5,0	6,5	8,0
Resistance Range (Other values upon request)		[Ω]	Min.	Please check the table below			
			Max.	7K5	11K	20K	27K
E-Series (preferred)			E24 = 5% ; E12 = 10% (Other upon request)				
Tolerances		±[%]	J = 5% ; K = 10%				
Temperature Coefficient		±[10 ⁻⁶ °K ⁻¹]	Depends on the value, please check the table below				
Working Temperature Range		[°C]	-55 ... +350				
Thermal Resistance		[KW ⁻¹]	140	70	56	43	35
Max. Working Voltage		[V] _{RMS}	$\sqrt{P_{70} \times R}$				
Dielectric Withstanding Voltage IEC115-1 clause 4.7 (1[min])		[V] _{RMS}	75				

DIMENSIONS [mm]



Type	Historical P/N:	L max.	RM	H	X max.
KPS200...L0	KP290 - 0	18,0	10 +1,0	17	3
KPS400...L0	KP292 - 0	23,3	15 +1,0		
KPS500...L0	KP294 - 0	33,4	25 +1,0		
KPS650...L0	KP296 - 0	43,5	35 +1,0		
KPS800...L0	KP298 - 0	53,7	45 +1,0		
KPS200...S0	KP290 - 1	18,0	10 +0,8	8	1,7
KPS400...S0	KP292 - 1	23,3	15 +0,8		
KPS500...S0	KP294 - 1	33,4	25 +0,8		
KPS650...S0	KP296 - 1	43,5	35 +0,8		
KPS800...S0	KP298 - 1	53,7	45 +0,8		

KPS Series Datasheet

PERFORMANCE DATA

Type		KPS200	KPS400	KPS500	KPS650	KPS800
Historical Part Number	Pin long	KP290 – 0	KP292 – 0	KP294 – 0	KP296 – 0	KP298 – 0
	Pin short	KP290 – 1	KP292 – 1	KP294 – 1	KP296 – 1	KP298 – 1
Derating Linear	[°C]	70...350 (0W)				
Climatic Category		55/200/56				
Failure Rate (Total, ϑ_0 , max, 60[%] cont. lev.)	[10 ⁻⁹ h ⁻¹]	appr. 100 depends on value				
Endurance IEC60115-1 clause 4.25 (P_{70} , @ 70[°C], 1000[h])	±[%]	3,0				
Damp Heat, Steady State IEC60115-1 clause 4.24 (40[°C], 93[% r.h.], 56[d])	±[%]	2,0				
Climatic Sequence IEC60115-1 clause 4.23 (260 ^{±5} [°C], 10 ^{±1} [s])	±[%]	2,0				
Resistance to Soldering Heat IEC60115-1 clause 4.18 (260 ^{±5} [°C], 10 ^{±1} [s])	±[%]	0,2				
Terminal Strength	±[%]	1,0				
Terminal Tensile Strength	[N]	40				
Solderability IEC60068-2-20 (245 ^{±5} [°C] 3 ^{±0.5} [s])		Solder bath method (> 95% coverage)				
Marking IEC60062		On termination; value 3 digits, Tolerance, Production date code				

ELECTRICAL CHARACTERISTICS

RESISTANCE RANGE (minimum)

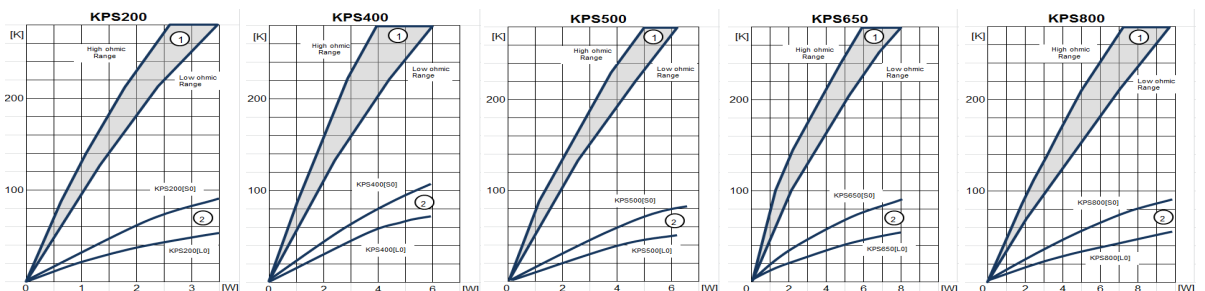
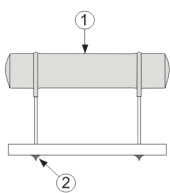
New P/Nr. Type	Historical P/N:	± 10 [%]	± 5 [%]
KPS200	KP290 - 0 / -1	OR1	OR2
KPS400	KP292 - 0 / -1	OR15	OR3
KPS500	KP294 - 0 / -1	OR27	OR47
KPS650	KP296 - 0 / -1	OR39	OR68
KPS800	KP298 - 0 / -1	OR47	OR91

TEMPERATURE COEFFICIENT

New P/Nr. Type	Historical P/N:	400 ± 50 ppm/K		-20 ± 60 ppm/K		0 ± 10 ppm/K	
KPS200	KP290 - 0 / -1	≥ 0R1	≤ 0R27	≥ 0R3	≤ 510R	≥ 560R	≤ 7K5
KPS400	KP292 - 0 / -1	≥ 0R15	≤ 0R56	≥ 0R62	≤ 620R	≥ 680R	≤ 11K
KPS500	KP294 - 0 / -1	≥ 0R27	≤ 0R62	≥ 0R68	≤ 1K1	≥ 1K2	≤ 20K
KPS650	KP296 - 0 / -1	≥ 0R39	≤ 1R3	≥ 1R5	≤ 1K6	≥ 1K8	≤ 27K
KPS800	KP298 - 0 / -1	≥ 0R47	≤ 1R6	≥ 1R8	≤ 2K	≥ 2K2	≤ 36K

TEMPERATURE RISE

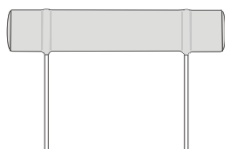
Solder Joints



KPS Series Datasheet

PACKAGING

The standard packaging for KPS in radial type is Bulk, dimensions below.



Type	Historical P/N:	Pack Code	Pieces	Forming Type	Special
KPS200	KP290 – 0	B = Bulk	500	RD- = Radial	L0 = Pin long
KPS400	KP292 – 0		500		
KPS500	KP294 – 0		250		
KPS650	KP296 – 0		250		
KPS800	KP298 – 0		250		
KPS200	KP290 – 1		1000		S0 = Pin short
KPS400	KP292 – 1		1000		
KPS500	KP294 – 1		500		
KPS650	KP296 – 1		500		
KPS800	KP298 – 1		250		

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

YAGEO:

[KPS400KB-RD-22RS0](#)