

Power Wirewound Resistors

Radial, fiber glass core

Coated



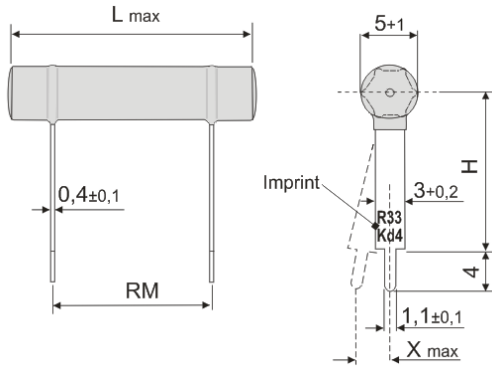
ELECTRICAL SPECIFICATIONS

Type		KP290	KP292	KP294	KP296	KP298
Nominal Power rating P_{70}	[W]	2,0	4,0	5,0	6,5	8,0
Resistance range	[Ω] Min Max	7K5	11K	20K	27K	36K
E-Series		E24 (5[%]), E12 (10[%])				
Tolerances	± [%]	5, 10				
Temperature coefficient	[10 ⁻⁶ *K ⁻¹]	*Depends on the value, please check the table below				
Temperature range	[°C]	-55 ... +350				
Thermal resistance	[KW ⁻¹]	140	70	56	43	35
Dielectric withstanding voltage <i>IEC115-1 clause 4.7 (1[min])</i>	[V]	75				
Max. working voltage	[V] _{RMS}	$\sqrt{P_{70} * R}$				

PERFORMANCE DATA

Derating linear	[°C]	70...350 (0W)
Climatic category		55/200/56
Failure Rate <i>(Total, θ_0, max, 60% cont. lev.)</i>	[10 ⁻⁹ h ⁻¹]	appr. 100 depends on value
Endurance <i>IEC60115-1 clause 4.25 (P_{70}, @ 70[°C], 1000[h])</i>	± [%]	3,0
Damp heat, steady state <i>IEC115-1 clause 4.24 (40[°C], 93[% r.h.], 56[d])</i>	± [%]	2,0
Climatic sequence <i>IEC115-1 clause 4.23</i>	± [%]	2,0
Terminal strength	± [%]	1,0
Terminal Tensile Strength	[N]	40
Resistance to soldering heat <i>IEC115-1 clause 4.12 (260[°C], 10[s])</i>	± [%]	± 0,2
Solderability <i>IEC 60068-2-20 (245^{±3}[°C] 3^{±0,3}[s])</i>		Solder bath method (min. 95[%] coverage)
Marking <i>IEC60062</i>		On termination; value 3 digits, Tolerance, Production date code

DIMENSIONS [mm]



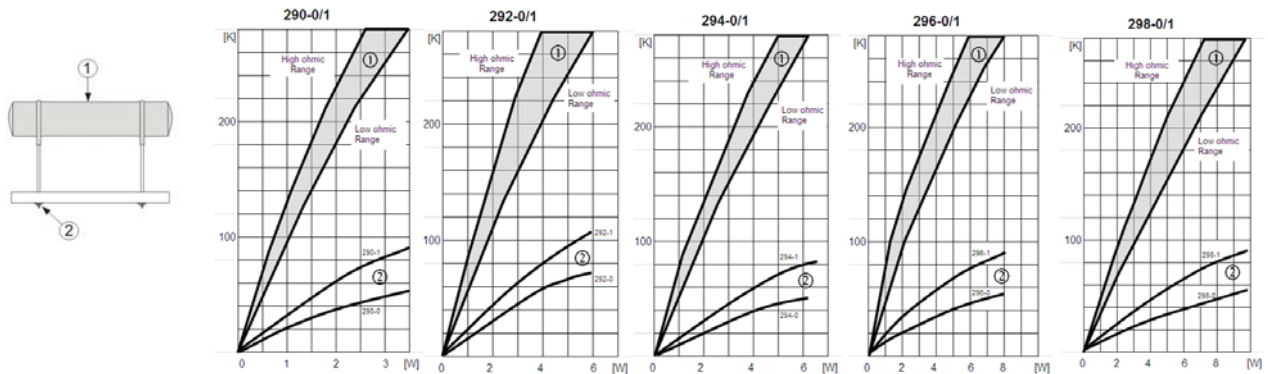
Type	L max	RM	H	X max
KP290-0	18,2	10 +1,0	17	3
KP292-0	23,3	15 +1,0		
KP294-0	33,4	25 +1,0		
KP296-0	43,5	35 +1,0		
KP298-0	53,7	45 +1,0		
KP290-1	18,2	10 +0,8	8	1,7
KP292-1	23,3	15 +0,8		
KP294-1	33,4	25 +0,8		
KP296-1	43,5	35 +0,8		
KP298-1	53,7	45 +0,8		

ELECTRICAL PERFORMANCE

Resistance range [minimum]		
Type	±10 [%]	±5 [%]
KP290-0 / 1	0R1	0R2
KP292-0 / 1	0R15	0R3
KP294-0 / 1	0R27	0R47
KP296-0 / 1	0R39	0R68
KP298-0 / 1	0R47	0R91

Temperature coefficient [ppm K ⁻¹]			
Type	TC +400 ±50	TC 0 ±40	TC 0 ±10
KP290	0R1...0R27	0R3...510R	560R...7K5
KP292	0R15...0R56	0R62...620R	680R...11K
KP294	0R27...0R62	0R68...1K1	1K2...20K
KP296	0R39...1R3	1R5...1K6	1K8...27K
KP298	0R47...1R6	1R8...2K	2K2...36K

TEMPERATURE RISE (Solder joints)



PACKAGING

The standard packaging for KP in axial type is bulk, dimensions below.



Type	Packaging	Pieces	Pack. Code
KP290-0	BULK	500	B
KP290-1		1000	
KP292-0		500	
KP292-1		1000	
KP294-0		250	
KP294-1		500	
KP296-0		250	
KP296-1		500	
KP298-0		250	
KP298-1		250	

ORDERING EXAMPLE

KP292-1	10	B	82R
Type	Tolerance	Pack-Code	R-Value