Power Wirewound Resistors
Ceramic case, axial

RoHS compliant

ELECTRICAL SPECIFICATIONS

Type			KWH01	KWH02	KWH03	KWH05	KWH07	KWH10	KWH15	KWH20	KWH25	KWH30	KWH40
Nominal Power rating	P_{25}	[W]	1,6	3,1	3,4	5,7	7,9	11,3	**15,0**	**20,0**	**25,0**	**30,0**	**40,0**
	P_{40}		1,4	2,7	**3,0**	**5,0**	**7,0**	**10,0**	13,3	17,7	22,1	26,5	35,4
	P_{70}		**1,0**	**2,0**	2,2	3,7	5,2	7,4	9,8	13,1	16,3	19,6	26,2
Resistance range	[Ω]	Min	0R1	0R03	0R015	0R015	0R05	0R08	0R1	0R15			
		Max	27R	36R	68R	130R	330R	510R	680R	1K			
E-Series			E24										
Tolerances	± [%]		5 [J]										
Temperature coefficient	[10^{-6}*K^{-1}]		300										
Temperature range	[°C]		-55 … +155										
Thermal resistance	[KW^{-1}]		85	42	39	23	16	11	9	6	5	4	3
Insulation voltage (1min.) IEC115-1 clause 2.2.17	[V]		500		700		1000				2000		
Max. working voltage	$[V]_{RMS}$		200	250	350		500				1000		
Insulation resistance *IEC115-1 clause 4.6*	[MΩ]		>1,000										

PERFORMANCE DATA

Derating linear	[°C]	70…155 (0W)
Periodic-pulse Overload *IEC115-1 clause 4.39*	± [%]	2,0
Endurance *IEC60115-1 clause 4.25* (P_{70}, @ 70[°C], 1000[h])	± [%]	5,0
Damp heat, steady state *IEC115-1clause 4.24* *(40[°C], 93[% r.h.], 56[d])*	± [%]	5,0
Short Time Overload *IEC60115-1 clause 4.13* *(U=2,5* $\sqrt{P_{70} * R}$, 5[s]*	± [%]	2,0
Temperature Cycling *IEC60115-1 clause 4.19* *(-55 /+155[°C] , 30min. , 5 cycles)*	± [%]	2,0
Robustness of Terminations *IEC115-1 clause 4.16* *(≥2,5[Kg], 10[s])*	[N]	24,5
Resistance to soldering heat *IEC115-1 clause 4.18* *(260$^{\pm 3}$[°C], 10$^{\pm 1}$[s] 2.5~3.5[mm])*	± [%]	1,0
Solderability *IEC 60068-2-20* *(235$^{\pm 5}$[°C], 3$^{\pm 0.5}$[s])*	[s]	Solder bath method (min. 90[%] coverage)
Solvent Resistance of Marking *IEC60115-1 clause 4.30* *(5$^{\pm 0.5}$[min] with ultrasonic)*		No deterioration of coatings and markings
Marking *IEC60062*		Printed in clear

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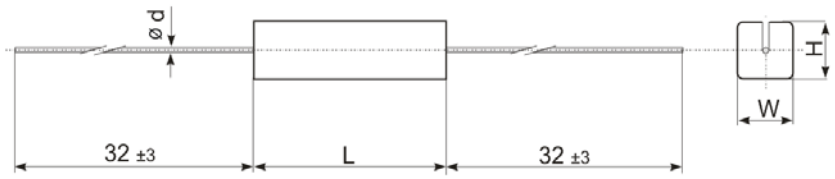
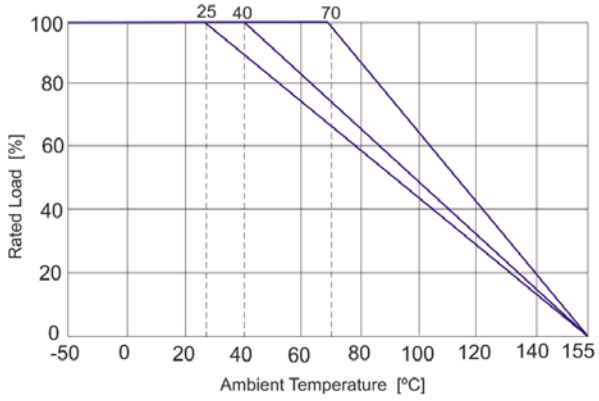
DIMENSIONS [mm]



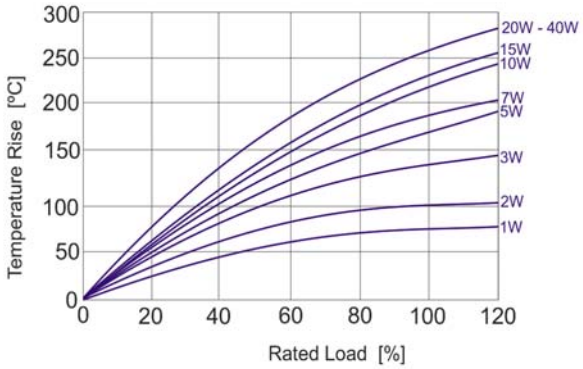
Type	L	W	H	ø d ±0,05
KWH01	13,0±1,0	5,5±1,0	5,5±1,0	0,6
KWH02	18,0±1,0	7,0±1,0	7,0±1,0	0,65
KWH03	22,0±1,5	8,0±1,0	8,0±1,0	0,8
KWH05	22,0±1,5	9,5±1,0	9,0±1,0	0,8
KWH07	35,0±1,5	9,5±1,0	9,0±1,0	0,8
KWH10	48,0±1,5	9,5±1,0	9,0±1,0	0,8
KWH15	48,0±1,5	12,5±1,0	12,5±1,0	0,8
KWH20	60,0±5,0	12,5±1,0	12,5±1,0	0,8
KWH25	60,0±5,0	14,0±1,5	13,0±1,5	0,8
KWH30	77,0±5,0	18,0±1,5	17,0±1,5	0,8
KWH40	90,0±5,0	19,0±1,5	18,0±1,5	0,8

DERATING CURVE & TEMPERATURE RISE

Derating Curve



Temperature Rise



PACKAGING

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

Type	Packaging	Pieces	Pack. Code
KWH01	Bulk	2000	B
KWH02		1400	
KWH03		1000	
KWH05		900	
KWH07		600	
KWH10		500	
KWH15		360	
KWH20		50	
KWH25		50	
KWH30		50	
KWH40		50	

ORDERING EXAMPLE

KWH05	**5**	**B**	**100R**
Type	*Tolerance*	*Pack-Code*	*R-Value*

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