

KNG Painted High Power Ceramic Tube Resistor

Catalogue

Feature

Application

Construction

Dimensions

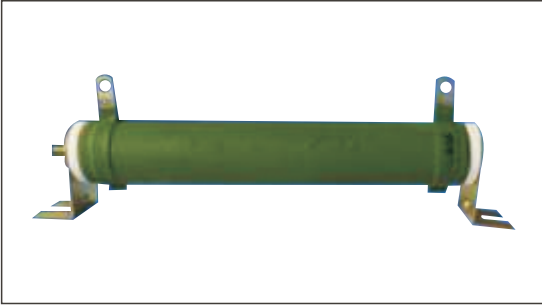
Ordering Information

Reference Standards

Applications And Ratings

Derating Curve

Performance



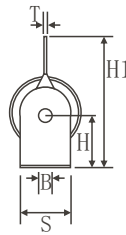
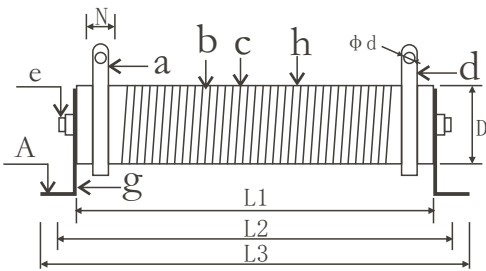
Feature

- I Surface painted, wide power range
- II Excellent high temperature load performance
- III Full-welded structure
- IV High reliability
- V Imported grey and green coating, character marking assembly and fittings (available)
- VI Resistance tolerance: $\pm 1\%$ 、 $\pm 2\%$ 、 $\pm 5\%$ 、 $\pm 10\%$

Application

- I Mostly used in large power supply
- II Electricity equipment
- III Electrical equipment
- IV Locomotive

Construction



ad	Terminal block
b	Epoxy resin insulating layer
c	Alloy wire
e	Metal screw
g	Zinc plating support
h	Alumina porcelain

Dimensions

Type	Power	Dimensions (mm)										
		L1 ± 5	L2 ± 5	L3 ± 5	D ± 2	B ± 1	H ± 1	H1 ± 3	S ± 2	N ± 2	$\phi d \pm 1$	T ± 0.5
KNG	20W	60	75	84	18	5	25	34	20	6	3.5	1.0
KNG	30W	82	104	120	20	5	25	50	20	6	3.5	1.0
KNG	50W	102	124	146	28	6.5	28	68	28	8	4.5	1.5
KNG	60W	102	124	146	28	6.5	28	68	28	8	4.5	1.5
KNG	80W	152	174	196	28	6.5	28	68	28	8	4.5	1.5
KNG	100W	182	204	226	28	6.5	28	68	28	8	4.5	1.5
KNG	150W	225	247	270	28	6.5	28	68	28	8	5.5	2.0
KNG	200W	225	247	270	28	6.5	28	68	28	8	5.5	2.0
KNG	300W	285	304	345	40	6.5	40	85	40	10	5.5	2.0
KNG	400W	316	338	375	40	6.5	40	85	40	10	5.5	2.0
KNG	500W	318	338	378	50	6.5	45	100	50	10	6.0	2.0
KNG	600W	348	368	408	50	6.5	45	100	50	10	6.0	2.0
KNG	750W	303	330	368	60	8.5	58	115	60	12	6.0	2.0
KNG	1000WS	303	330	368	60	8.5	58	115	60	12	6.0	2.0
KNG	1000W	433	460	500	60	8.5	58	115	60	12	6.0	2.0
KNG	1200W	418	445	485	60	8.5	58	115	60	12	6.0	2.0
KNG	1500WS	418	445	485	60	8.5	58	115	60	12	6.0	2.0
KNG	1500W	433	460	500	70	8.5	65	125	70	15	6.0	2.0
KNG	2000WS	513	540	580	60	8.5	60	119	60	12	6.5	2.0
KNG	2000W	433	457	500	80	6.5	82	157	80	15	6.5	2.0
KNG	2500WS	603	630	670	60	8.5	60	119	60	12	6.5	2.0
KNG	2500W	433	475	525	80	8.5	82	170	80	15	6.5	2.0
KNG	3000W	433	475	525	100	8.5	82	170	100	15	6.5	2.0
KNG	5000W	448	505	525	150	10	120	230	150	30	10.0	4.0
KNG	10000W	900	925	980	150	10	120	230	150	30	10.0	4.0

Note: Customized products please contact kwx@kwxcom.com

Ordering Information

Example:

KNG	300	J	10R00	A
(1)	(2)	(3)	(4)	(5)
Series Name	Power Rating	Resistance Tolerance	Resistance	Special code

(1)Type: KNG SERIES

(2)Power Rating: 10B=10W,50B=50W,100=100W,300=300W

(3)Tolerance: J= $\pm 5\%$,K= $\pm 10\%$

(4)Resistance Value:0R100=0.1 Ω ,0R200=0.20 Ω ,10R00=10 Ω ,10K00=10K Ω

(5)Special code: A1=Without brackets,A2=With brackets

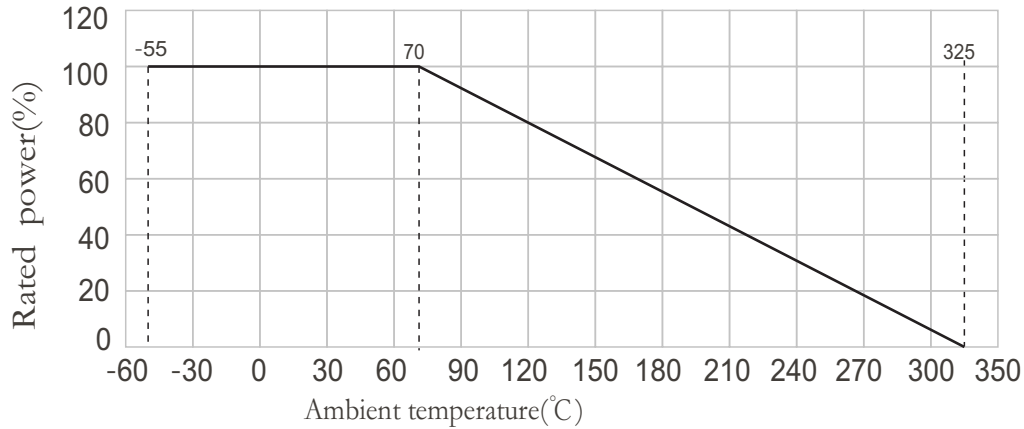
Reference Standards

JISC 5201-1

Applications And Ratings

Type	Power (W)	Resistance Range(Ω)	Tolerance	T.C.R PPM/ $^{\circ}$ C	Operating Temp.Range	Max Working Voltage (V)	Max Overload Voltage (V)
KNG	20W	0.1 Ω ~3K Ω	$\pm 1\%$ $\pm 2\%$ $\pm 5\%$ $\pm 10\%$	± 350	-55 $^{\circ}$ C ~325 $^{\circ}$ C	$\sqrt{P \times R}$	$\sqrt{10P \times R}$
KNG	30W	0.1 Ω ~3K Ω					
KNG	50W	0.2 Ω ~3.3K Ω					
KNG	60W	0.2 Ω ~10K Ω					
KNG	80W	0.2 Ω ~24K Ω					
KNG	100W	0.2 Ω ~51K Ω					
KNG	150W	0.2 Ω ~51K Ω					
KNG	200W	0.2 Ω ~56K Ω					
KNG	300W	0.2 Ω ~62K Ω					
KNG	400W	0.2 Ω ~150K Ω					
KNG	500W	0.2 Ω ~150K Ω					
KNG	600W	0.2 Ω ~150K Ω					
KNG	750W	0.2 Ω ~150K Ω					
KNG	1000WS	0.2 Ω ~150K Ω					
KNG	1000W	0.2 Ω ~150K Ω					
KNG	1200W	1 Ω ~150K Ω					
KNG	1500WS	1 Ω ~150K Ω					
KNG	1500W	1 Ω ~150K Ω					
KNG	2000WS	1 Ω ~150K Ω					
KNG	2000W	1 Ω ~150K Ω					
KNG	2500WS	1 Ω ~150K Ω					
KNG	2500W	1 Ω ~150K Ω					
KNG	3000W	1 Ω ~150K Ω					
KNG	5000W	1 Ω ~150K Ω					
KNG	10000W	1 Ω ~150K Ω					

Derating Curve



Performance

Test Items	Performance	Test Methods(JIS C 5201-1)
Temperature coefficient	$\pm 350\text{PPM}/^{\circ}\text{C}$	Test resistance value at normal temperature and normal temperature added 100°C , calculate 70°C resistance value change rate.
Short-time overload	$\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$	According 10 times rated power to account the power or max. overload voltage(get the lower) for 5seconds.
Resistance to soldering heat	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	Immerge into the $350 \pm 10^{\circ}\text{C}$ tin stove for 2~3 seconds
Solderability	Tth soldering area is over 98%	Immerge into the $245 \pm 3^{\circ}\text{C}$ tin stove for 2~3 seconds
Temperature cycle	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	At -55°C for 30min, then at $+25^{\circ}\text{C}$ for 10~15min, then at $+155^{\circ}\text{C}$ for 30min, then at $+25^{\circ}\text{C}$ for 10~5, min, total 5cycles.
Load life in humidity	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$	Overload rated voltage or Max.working voltage(get the lower)for 1000hours(1.5hours on and half-hour off) at the $40 \pm 2^{\circ}\text{C}$ and 90~95% relative humidity.
Load life in heat	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$	Overload rated voltage or Max.working voltage(get the lower)for 1000hours(1.5 hours on and half-hour off) at the $70 \pm 2^{\circ}\text{C}$.
Nonflammability	No visible flame	Respectively load AC voltage by 5,10,16 times rated power for 5 minutes.