

# PRODUCT BULLETIN

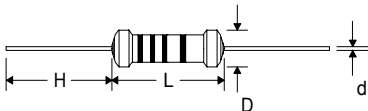


## KNP-SERIES

WIREWOUND RESISTORS  
FLAME-PROOF

WILLOW TECHNOLOGIES LTD.  
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E-mail [rob@willow.co.uk](mailto:rob@willow.co.uk)  
Website <http://www.willow.co.uk>

CERAMIC CORE: 75% ALUMINA  
LEAD: TIN PLATED COPPER  
CAP: TIN PLATED STEEL CAP  
COATING: SILICON  
WIRE: Cu-Ni OR Ni-Cr WIRE



### Dimensional Correlation

in.	mm
.002	0.05
.020	0.5
.024	0.6
.031	0.8
.059	1.5
.138	3.5
.157	4.0
.217	5.5
.256	6.5
.335	8.5
.354	9.0
.433	11.0
.590	15.0
.709	18.0
.984	25.0
1.063	27.0
1.575	40.0
1.693	43.0



DEDICATION TO EXCELLENCE

TYPE	RATED WATTS	Resistance range
KNP-1/2W	1/2W	0.1 - 240R
KNP-1W	1W	0.1 - 470R
KNP-2W	2W	0.1 - 820R
KNP-3W	3W	0.1 - 820R
KNP-5W	5W	0.1 - 1.3K
KNP-7W	7W	0.1 - 3.3K
KNP-8W	8W	0.1 - 2K
KNP-10W	10W	0.1 - 4.7K

Note: Resistance up to 27  $\Omega$  maximum for Non-Inductive type  
Lower or higher resistance values other than the list are also available

TYPE	DIMENSIONS (mm)			
	D $\pm 0.5$ mm	L $\pm 1.5$ mm	H(MIN)	d $\pm 0.05$
KNP-1/2W	3.5	9	25	0.60
KNP-1W	4.0	11	27	0.8
KNP-2W	5.5	15	27	0.8
KNP-3W	5.5	15	27	0.8
KNP-5W	6.5	18	27	0.8
KNP-7W	8.5	25	27	0.8
KNP-8W	8.5	40	27	0.8
KNP-10W	8.5	53	27	0.8

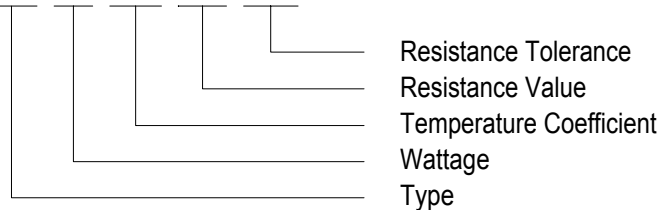
### TEMPERATURE COEFFICIENT

-30°C to 200°C  $\pm 300$ PPM/°C  
Resistance Tolerance  $\pm 5$

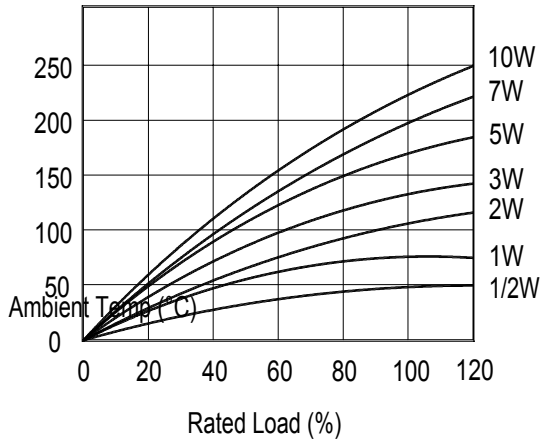
### How to Order

Sample Part Number

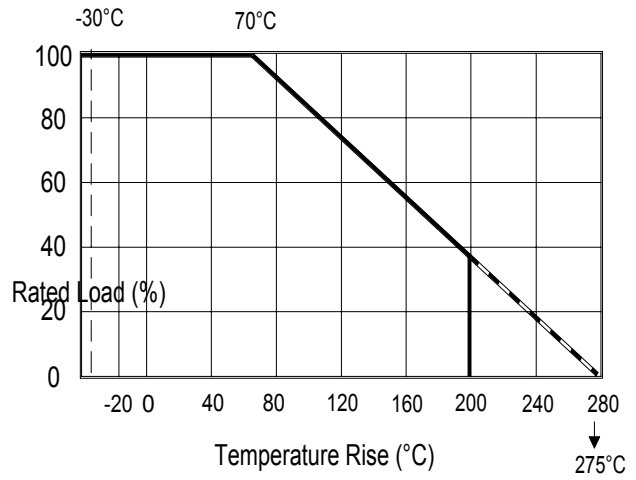
KNP 1W T300 1RO  $\pm 5\%$



TEMPERATURE RISE AT 25°C



DERATING CURVE



Characteristics	Condition	Spec.
Resistance Temp. Coeff.	-30°C ~ +200°C	± 300 ppm/°C
Short Time Over Load	5 times of rated wattage for 5 sec.	± 2%
Rate Load	Rate watt 30 min.	± 1%
Voltage Durability	500V AC 1 min.	not changed
Insulation Resistance	500V megger	500 M Ω
Temp Cycle	-30°C ~ 85°C 5 cycles	± 1%
Load Life	40°C 95% RH on-off cycle 500 hrs.	± 5%
Moisture-proof Load Life	40°C 95% RH on-off cycle 500 hrs.	± 3%
Incombustibility	6 times of rated wattage for 5 min.	not flamed

PACKAGING:	TAPE AND REEL	
PIECES PER REEL:	KNP 1/2W AND 1W	2500
	KNP 2W, 3W AND 5W	1000
	KNP 7W	500
BULK:	KNP 8W AND 10W	100