

# KNT 被釉功率瓷管电阻器 Glaze High Power Ceramic Tube Resistors



本体颜色: Body Color

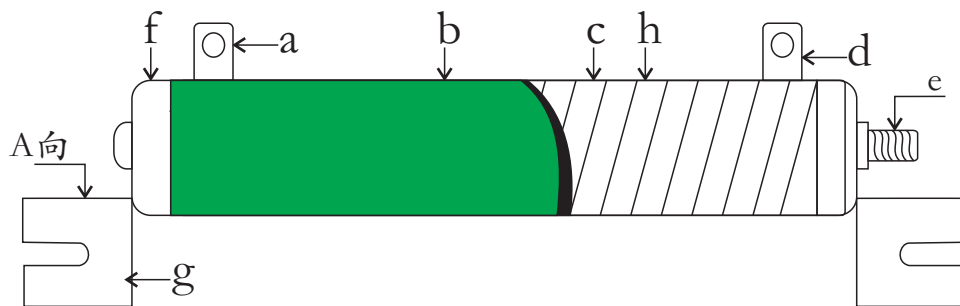
标准品: Standard (Green 绿色)

标示: Marking

(根据客户要求提供相应标识)

(According to the customer request to provide corresponding identification)

## ● 结构图 Construction



ad	b	c	e	f	g	h
接线端子	耐高压绝缘陶瓷釉覆盖层	合金丝	螺杆	陶瓷垫片	镀锌支架	高铝瓷管
Terminal block	High voltage insulation ceramic glaze covering	Alloy wire	Metal screw	Ceramic facing	Zinc plating support	Alumina porcelain

## ● 特性 Feature

I 电阻表面被釉，抗污染性强，耐化学气体侵蚀、绝缘度高，耐湿耐温，可在恶劣环境下使用。

Surface glazed, won't be easily polluted or eroded by chemistry gas, high insulating capacity, can resist humidity and heat well, can be used in the atrocious environment.

II 过负荷能力强，热稳定性好，使用寿命长、耐高压。

Good overload and heat durability capacity, the useful time is longer than the others, withstand high voltage.

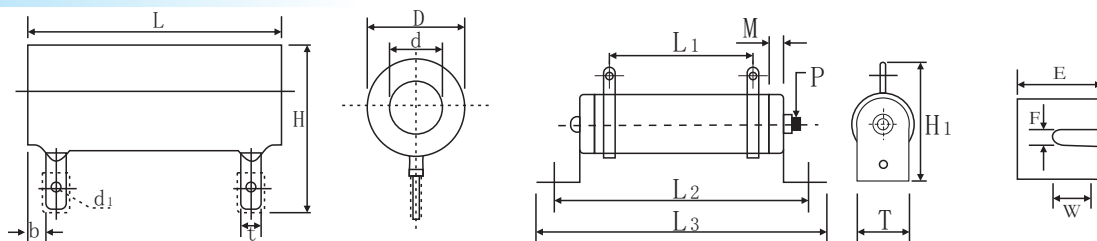
III 精度范围:  $\pm 5\%$ 、 $\pm 10\%$

Resistance tolerance:  $\pm 5\%$ 、 $\pm 10\%$

## ● 参考规格 Reference Standards

JIS C 5201-1

## 规格尺寸 Specifications and Dimensions



规格 Type	功率 Power	外形尺寸 Dimensions (mm)															
		L±3	L1±3	L2±2	L3±3	D±1	d±1	H±1.5	H1±1.5	b±0.5	t±0.5	d1±0.5	M±0.5	T±1.0	W±0.5	E±1	F±0.5
KNT	10	26	15	60	80	13	4	27	40	3.5	4.5	2	5	15	5	8	5
KNT	15	35	24	70	90	14	5.5	28.5	40	3.5	4.5	2	5	15	5	8	5
KNT	20	41	30	75	95	14	5.5	28.5	40	3.5	4.5	2	5	15	5	8	5
KNT	25	45	34	80	100	17	8	31	45	3.5	4.5	2	5	18	5	10	5
KNT	30	51	40	85	105	17	8	31	45	3.5	4.5	2	5	18	5	10	5
KNT	35	51	40	85	105	21	12	35	50	3.5	4.5	2	5	20	5	10	5
KNT	40	71	60	105	125	21	12	35	50	3.5	4.5	2	5	20	5	10	5
KNT	45	87	76	120	140	21	12	35	50	3.5	4.5	2	5	20	5	10	5
KNT	50	91	76	125	145	29	20	43	60	4.5	6	3	5	28	14	20	6.5
KNT	60	91	76	125	145	29	20	43	60	4.5	6	3	5	28	14	20	6.5
KNT	75	140	126	175	195	29	20	43	60	4.5	6	3	5	28	14	20	6.5
KNT	80	140	126	175	195	29	20	43	60	4.5	6	3	5	28	14	20	6.5
KNT	100	170	156	205	225	29	20	43	60	4.5	6	3	5	28	14	20	6.5
KNT	120	170	156	205	225	29	20	43	60	4.5	6	3	5	28	14	20	6.5
KNT	150	215	200	250	270	29	20	43	60	4.5	6	3	5	28	14	20	6.5
KNT	180	215	200	250	270	29	20	43	60	4.5	6	3	5	28	14	20	6.5
KNT	200	265	245	300	320	29	20	48	65	4.5	8	4	5	28	14	20	6.5
KNT	225	265	245	300	320	29	20	48	65	4.5	8	4	5	28	14	20	6.5
KNT	250	265	245	300	320	29	20	48	65	4.5	8	4	5	28	14	20	6.5
KNT	300	250	250	285	316	32	30	55	70	4.5	8	4	8	40	16	25	6.5
KNT	350	250	232	285	316	42	30	55	70	4.5	8	4	8	40	16	25	6.5
KNT	400	300	284	335	355	42	30	55	70	4.5	8	4	8	40	16	25	6.5
KNT	450	330	310	375	400	42	30	68	90	4.5	8	4	8	40	20	25	6.5
KNT	500	330	310	375	400	52	25	78	100	4.5	8	4	8	50	25	28	6.5

备注:具体规格尺寸可以根据客户的需求制作, 同时也可以制作一管多个阻值, 也可按客户要求取消固定支架。

Note: We can according customer requirements to customize the specification and dimension, also can product multiple resistance value of one ceramic tube or cancel the fixed plank.

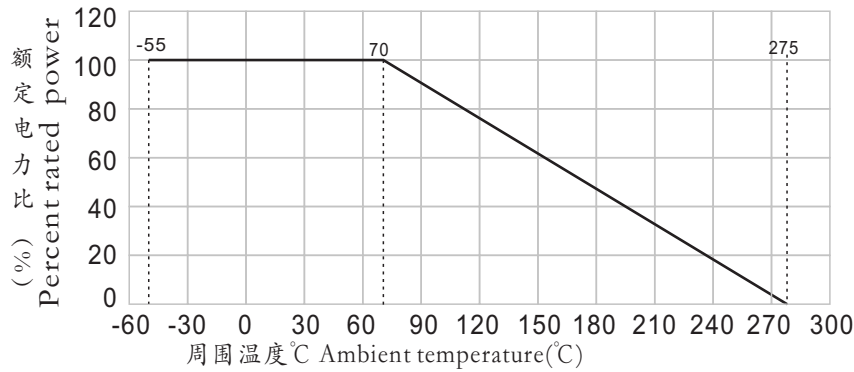
可协议生产600W~8000W电阻。Our factory can also produce 600W~8000W non-standard resistors according to the requirement

## ● 功率、阻值范围与耐电压 Power And Resistance etc

规格 Type	功率 Power (W)	阻值范围 Resistance Range( $\Omega$ )		误差值 Tolerance	温度系数 T.C.R PPM/ $^{\circ}$ C	最高使用电压 Max Working Voltage (V)	最高负荷电压 Max Overload Voltage (V)	耐电压 Dielectric Withstanding Voltage (V)
		标准型 Standard	无感型 Non-inductive					
KNT	10	1~1K	1~100					700V/Ac
KNT	15	1~3.3K	1~100					
KNT	20	1~10K	1~100					
KNT	25	1~10K	1~100					
KNT	30	1~10K	1~200					
KNT	35	1~15K	1~200					
KNT	40	1~20K	1~200					
KNT	45	1~30K	1~200					
KNT	50	1~30K	1~200					
KNT	60	1~30K	1~300					
KNT	75	1~50K	1~300					
KNT	80	1~50K	1~300					
KNT	100	1~50K	1~300					
KNT	120	1~80K	1~300					
KNT	150	1~80K	1~300					
KNT	180	1~100K	1~300					
KNT	200	1~100K	1~300					
KNT	225	1~100K	1~300					
KNT	250	1~100K	1~500					
KNT	300	1~100K	1~500					
KNT	350	1~100K	1~500					
KNT	400	1~100K	1~1000					
KNT	450	1~100K	1~1000					
KNT	500	1~100K	1~1000					

## ● 额定温度下降曲线图 Derating Curve

例 Example



## ● 性能 Performance

试验项目 Test Items	性能 Performance	试验方法 Test Methods(JIS C 5201-1)
温度系数 Temperature coefficient	$\pm 250\text{ppm}/^\circ\text{C}$	在常温及常温+100°C时分别测量电阻并计算每度的阻值变化率。 Test resistance value at normal temperature and normal temperature added 100°C, calculate $^\circ\text{C}$ resistance value change rate.
短时间负荷 Short-time overload	$\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$	施加10倍额定功率或最高负荷电压(取较小者)5秒。 According 10 times rated power to account the power or max. overload voltage(get the lower) for 5seconds.
耐焊接热 Resistance to soldering heat	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	在350±10°C的锡炉中浸入2~3秒。 Immerge into the 350±10°C tin stove for 2~3 seconds
可焊性 Solderability	焊锡面积覆盖率95%以上 Tth soldering area is over 98%	在245±3°C的锡炉中浸入2~3秒。 Immerge into the 245±3°C tin stove for 2~3 seconds
温度循环 Temperature cycle	$\Delta R \leq \pm (1\%R_0 + 0.05\Omega)$	在-55°C时放置30分钟,然后在+25°C时放置10~15分钟,然后再在+155°C时放置30分钟,然后在25°C时放置10~15分钟,共循环5次。At-55°C for 30min, then at +25°C for 10~15min, then at +155°C for 30min, then at +25°C for 10~5, min, total 5cycles.
耐湿负荷寿命 Load life in humidity	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$	在温度为40±2°C,相对湿度为90~95%的恒温恒湿箱中,施加额定电压或最大工作电压(取较小者)共1000小时(通1.5小时,断0.5小时)。Overload rated voltage or Max.working voltage(get the lower) for 1000hours(1.5hours on and half-hour off) at the 40±2°C and 90~95% relative humidity.
耐温负荷寿命 Load life in heat	$\Delta R \leq \pm (5\%R_0 + 0.05\Omega)$	在70±2°C恒温恒湿箱中施加额定电压或最大工作电压(取较小者)共1000小时(通1.5小时,断0.5小时)。Overload rated voltage or Max.working voltage(get the lower) for 1000hours(1.5hours on and half-hour off) at the 70±2°C.
不燃性 Nonflammability	不可有明显火焰 No visible flame	分别按5、10、16倍额定功率加交流负荷5分钟。 Respectively load AC voltage by 5,10,16 times rated power for 5 minutes.
耐压 Withstand voltage	AC等于700V或900V 或1000V无击穿	耐压测试仪,测量按线端与电阻体之间的绝缘强度。 Pressure testre, measurement according to be line end and resistance body between the dielectric strength

## ● 料号编号 Ordering Information

例 example

KNT	300	J	10R00	A
产品名称 Product Name	功率Power	精度 Tol	阻值Ohm	特殊码 Special code
被釉功率瓷管电阻器 Glaze High Power Ceramic Tube Resistors	10B=10W 50B=50W 100=100W 300=300W	J=±5% K=±10%	0R100=0.1Ω 0R200=0.22Ω 10R00=10Ω 10K00=10KΩ	A1不带支架 A1Without brackets A2带支架 A2With brackets