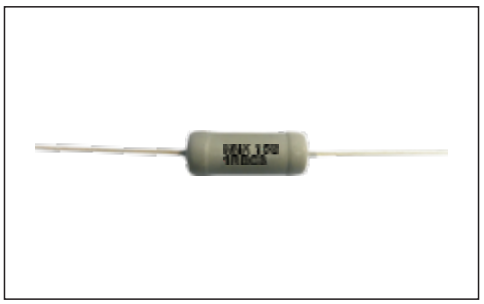
KNX High Percision Wire Wound Resistors



Features

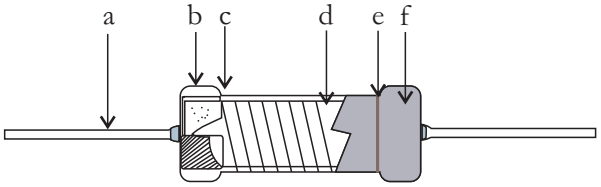
Ⅰ High Precision

Ⅱ Low T.C.R

Ⅲ Wide Working Temperature Range

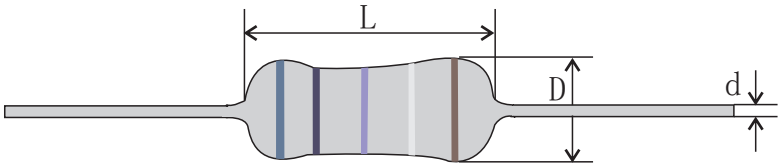
Ⅳ Perfect Pulse Voltage

Construction



a	Lead wire
b	Cap
c	Ceramic base
d	Wire wound
e	Marking or color code
f	Insulation coat

Dimensions, Applications And Ratings



Type	Power	Resistance Range(Ω)	Dimensions(mm)			Max working Voltage	Dielectric with standing	T.C.R (PPM/℃)
			L±1	D±0.5	d±0.05			
KNX15S	1/2W	0.1~2.5KΩ	10	2.5	0.6	80V	125V	C5=±15 C3=±25 C2=±50 C1=±100
KNX16S	1W	0.1~6.8KΩ	12	3.5	0.7	130V	300V	
KNX17S	2W	0.1~10KΩ	14	5	0.8	140V	520V	
KNX18S	3W	0.1~22KΩ	16	6	0.8	200V	600V	
KNX19S	5W	0.1~55KΩ	25	8	0.8	400V	700V	

Ordering Information

Example:

KNX	14	D	R100	C5
(1)	(2)	(3)	(4)	(5)
Series Name	Power Rating	Resistance Tolerance	Resistance	T.C.R

(1)Type: KNX SERIES

(2)Power Rating: 15S=0.5W,16S=1W,17S=2W,18S=3W, 19S=5W

(3)Tolerance: J=±5%,F=±1%,D=±0.5%,C=±0.25%,B=±0.10%,W=±0.05%,P=±0.025%

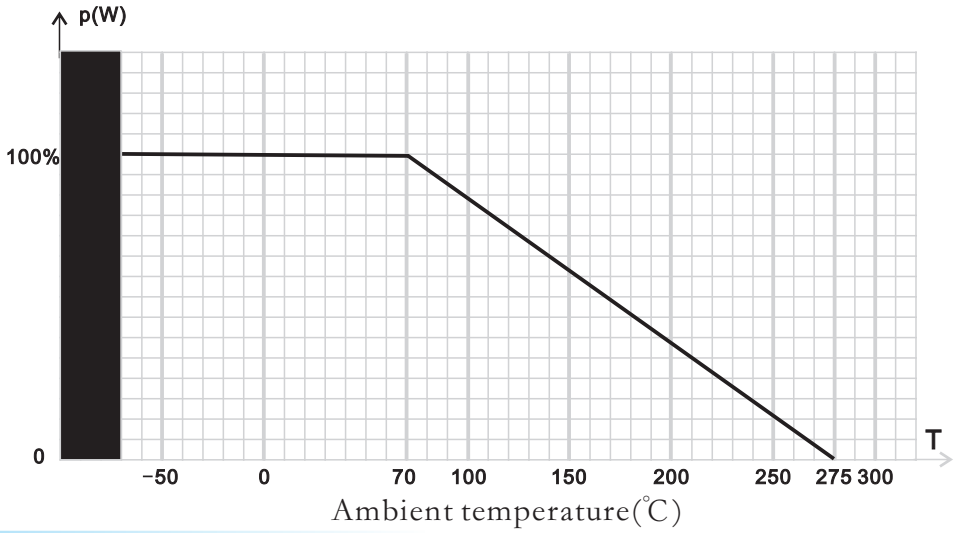
(4)Resistance Value:R100=0.1R、1R00=1Ω、10R0=10Ω、100R0=100Ω

(5)T.C.R:C5=±15ppm/℃,C3=±25ppm/℃,C2=±50ppm/℃,C1=±100ppm/℃

Reference Standards

JISC 5201-1

Derating Curve



Performance

IEC 60115-1 CLAUSE	IEC 60068-2 TEST METHOD	TEST	PROCEDURE	REQUIREMENTS permissible change△R/R
4.5	—	resistance	(%)	F(±1);D(±0.5);C(±0.25);B(±0.10);W(±0.05);P(±0.025)
4.8	—	temperature coefficient (ppm/℃)	at 25/85/25℃or under request at 25/-55/25℃ or at 25/125/25℃	C5(±15);C3(±25);C2(±50);C1(±100);C0(NO TCR)
4.13	—	short time overload;	room temperature; U=2.5*√P70*R ≤2Umax;5S	±0.25%+0.05Ω
4.17.2	58(Td)	solderability	solder bath method; 230℃;3S	good tinning≥95% covered;no visible damage
4.18.2	58(Td)	resistance to soldering heat	solder bath method 230±5℃;5±1S	±0.25%+0.05Ω
4.19	14(Na)	rapid change of temperature	30 minutes at -55℃ 30 minutes at +155℃ 5cycle	±0.25%+0.05Ω
4.22	6(B4)	vibration	6h 10to 2000Hz 1.5mm or 196m/s	±0.25%+0.05Ω
4.23		climatic		
		sequence;		
4.23.2	2(Ba)	dry heat	UCT;16h	
4.23.3	30(Db)	damp heat,	55℃;24h;≥90%RH	
		cyclic	1cycle	
4.23.4	1(Aa)	cold	LCT;2h	
4.23.5	13(M)	low air	8.5kPa	
		pressure	25±10℃ 2h	
4.23.6	30(Db)	damp heat,	55℃;24h;≥90%RH	±0.25%+0.05Ω
		cyclic	5 cycles	
			LCT=-55℃	
			UCT=125℃	
4.24	3(Ca)	damp heat, steady state	40±2℃;56days 93+2/-3%RH	±0.25%+0.05Ω
4.25.1	— —	endurance standard operation mode	U=√P70*R≤Umax; 1.5h on;0.5h off; 70℃ 1000h	±0.50%+0.05Ω
4.29	45(XA)	component solvent	isopropy alcohol; +23℃	marking legible
		resistance	toothbrush method	no visible damage

Remark :unless otherwise specified,all values are tested at the following condition;
temperature:21℃ to 25℃;Relative humidity:45% to 60%