

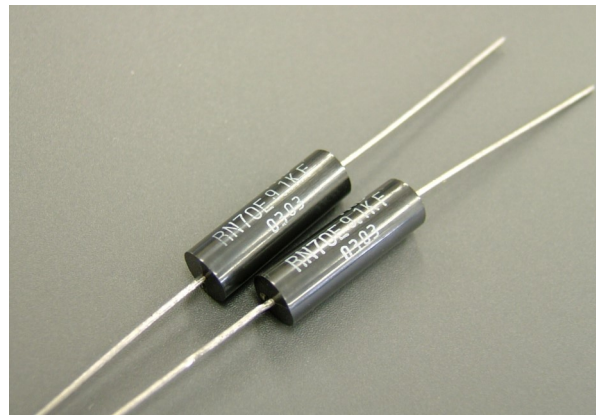
# Correctohm-RN Series

# RESISTOR

Metal Film Resistor

High precision & Low T.C.R

Molding insulation



## Model number

**RN**      **60**      **E**      **10kohm**      -      **B**  
 Product type    Rated power    Temperature coefficient of resistance    Resistance value    Resistance tolerance

## Temperature coefficient of resistance

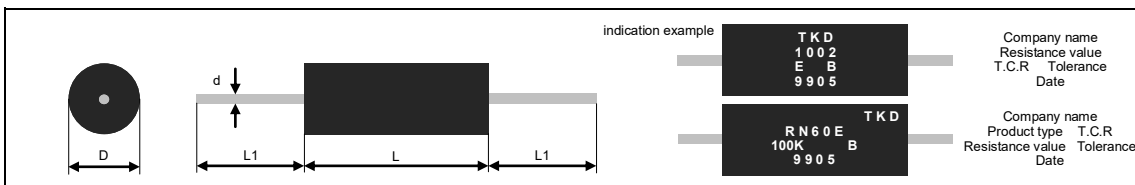
Symbol	R	S	E	C
T.C.R [ppm/degs.C]	±5	±10	±25	±50

\* The guarantee temperature range of T.C.R is 0~70 degs.C about R, S.

## Resistance tolerance

Symbol	B	C	D	F
Tolerance [%]	±0.1	±0.25	±0.5	±1

## Dimensions



## Dimensions [mm]

Product type	D	L	d	L1
RN50	1.8±0.2	3.8±0.5	0.4±0.05	30±3
RN55	3.4±0.2	6.6±0.5	0.6±0.05	38±3
RN60	3.9±0.2	10.5±0.5	0.6±0.05	38±3
RN65	5.3±0.3	16.0±0.5	0.6±0.05	38±3
RN70	6.5±0.5	20.0±0.5	0.8±0.05	38±3
RN75	10.0±0.5	28.0±0.5	0.8±0.05	38±3

## Materials

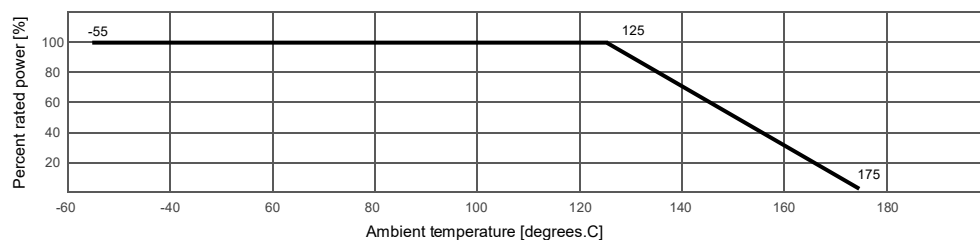
Insulation molding	epoxy resin
Resistive film	Ni-Cr type
Lead wire	annealed copper wire
Core	ceramic

## Authorization results

MIL-R-10509F AMENDMENT4  
 DSP C 6001-501 C  
 DSP C 6001-502 E

## Rating

Product type	Rated power [W]		Highest usable voltage [V]		Extreme highest overload voltage [V]	Applicable temperature range [degs C]
	125 degs.C	70 degs. C	125 degs. C	70 degs. C		
RN50	0.05	0.1	200	200	400	-55~175 [degs.C]
RN55	0.1	0.125	200	250	400	
RN60	0.125	0.25	250	300	500	
RN65	0.25	0.5	300	350	600	
RN70	0.5	0.75	350	400	700	
RN75	1	1.5	500	600	1000	



## Production resistance value range

Product type	Resistance tolerance	Production resistance value range [ohm]			
		Temperature coefficient of resistance			
		R	S	E	C
RN50	B	49.9~200K		49.9~200K	
	C, D			30.1~200K	
	F			10.0~200K	
RN55	B	49.9~301K	49.9~397K		10~511K
	C, D		30.1~397K		
	F				
RN60	B	49.9~301K	49.9~511K		10~1M
	C, D		30.1~511K		
	F				
RN65	B	49.9~397K	49.9~1M		10~1M
	C, D		30.1~1M		
	F				
RN70	B	49.9~511K	49.9~3.52M		10~5.11M
	C, D		30.1~3.52M		
	F				
RN75	B	100~301K	49.9~1M		49.9~5.11M
	C, D				
	F				

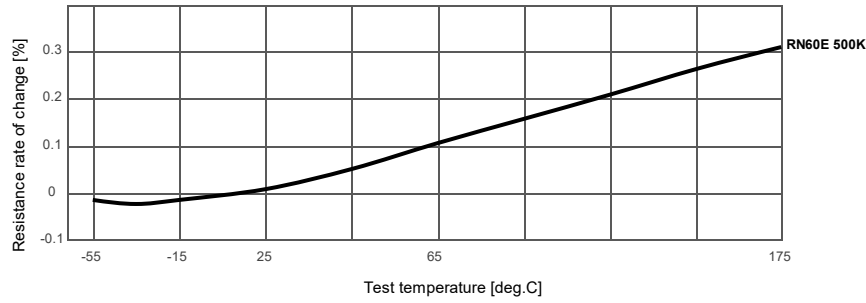
## MIL standard and DSP standard

Product type	Resistance tolerance	Temperature coefficient of resistance	Production resistance value range
RN55	B, C, D, F	E, C	49.9~100K
RN60			49.9~499K
RN65			49.9~1M
RN70			49.9~1M
RN75			49.9~2M

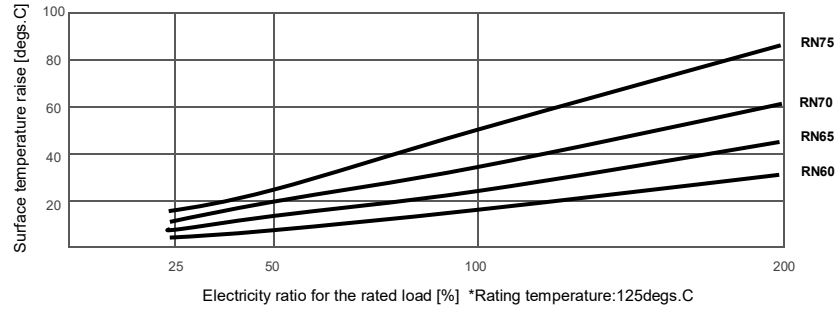
## General specifications

RN	
Storage temp. range	-10 to +50 degrees C
Relative humidity	85%RH (No condensation)

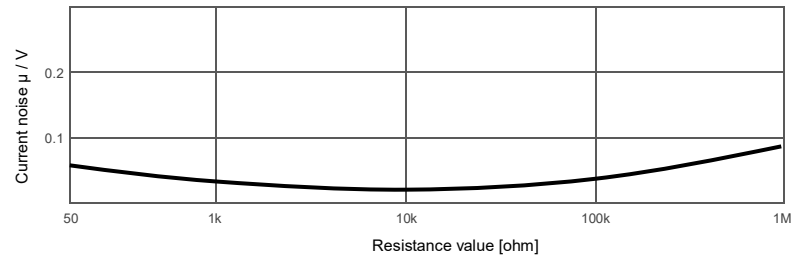
### Temperature coefficient of resistance



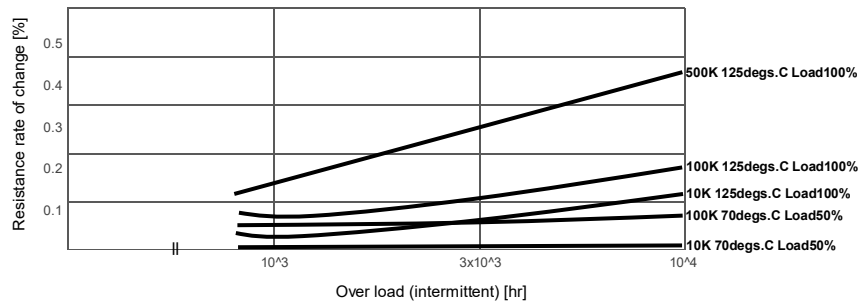
### Surface temperature raise



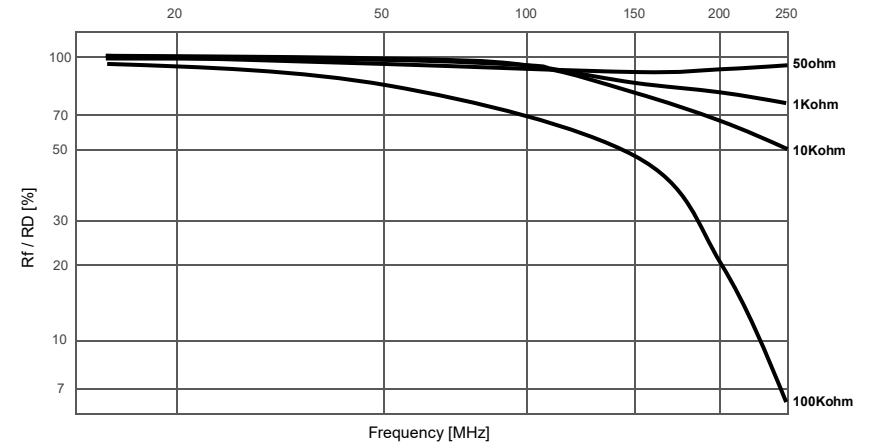
### Current noise



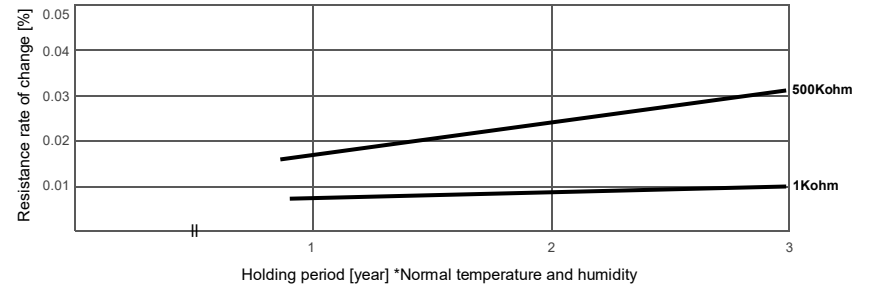
### Rated load test



### High frequency characteristic



### Secular variation



### Performance

Performance test contents		Performance of Correctohm-RN	JIS C 5202
Electric	Resistance value	Rate value	5.1
	T.C.R	Rate value	5.2
	Overload (short time)	±(0.1%+0.01ohm)	5.5
	Insulation resistance	100,000Mohm Min.	5.6
	Voltage proof	±(0.1%+0.01ohm)	5.7
	Overload (intermittent)	±(0.1%+0.05ohm)	5.8
Mechanic	Terminal strength	±(0.02%+0.05ohm)	6.1
	Vibration resistance	±(0.1%+0.05ohm)	6.3
	Solder dip resistance	±(0.05%+0.05ohm)	6.4
	Solderability	95% Min.	6.5
	Solvent resistance	Appearance not having a problem.	6.9
Weatherability	Low temperature test	±(0.1%+0.05ohm)	-
	Temperature cycling test	±(0.1%+0.05ohm)	7.4
	Humidity resistance	±(0.2%+0.05ohm)	7.9
	Rated load (70degs.C)	±(0.2%+0.05ohm)	7.10
	Rated load (125degs.C)	±(0.3%+0.05ohm)	

### Note

\* Use to the apparatus which may cause an in-vehicle apparatus (including the train), medical equipment, an aviation apparatus, an apparatus about human life including the ship apparatus and the serious damage; when is done, please talk by all means.