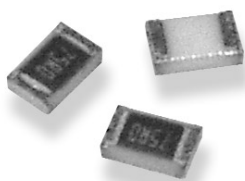


Type RN73 Series

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The RN73 series is a high stability precision chip resistor range offering various power dissipations relating to chip size, TCR's down to 5ppm/°C and resistance tolerances to 0.01%. The resistor is produced with three sputtered layers giving optimum performance. Values are restricted to the E96 and E24 value grids. The RN73 has accurate and uniform physical dimensions to facilitate placement.

Key Features

- High Precision - TCR 5ppm/°C and 10ppm/°C
- Tolerance down to 0.01%
- Thin Film (Nichrome)
- Choice of Packages
- Stable High Frequency Performance
- Temperature Range -55°C to +125°C

Characteristics - Electrical

	0402			0603			0805			1206		
Rated Power @ 70°C (W):	0.063			0.063			0.1			0.125		
Resistance Range (Ohms) Min:	50R	47R	25R	10R	25R	5R11	10R	25R	5R11	25R	5R11	
Max:	15K	100K	100K	270K	200K	470K	270K	500K	470K	500K	470K	
Tolerance (%):	0.01	0.05	0.1	0.01	0.05	0.1	0.01	0.05	0.1	0.01	0.05	0.1
Code Letter:	L	A	B	L	A	B	L	A	B	L	A	B
Selection Series:	E24 / E96			E24 / E96			E24 / E96			E24 / E96		
Temperature Coefficient (ppm/°C):	10ppm			10ppm			10ppm		5ppm	10ppm		5ppm
Code Letter:	C			C			C		A	C		A
Limiting Element Voltage (V):	25			50			100			150		
Maximum Overload Voltage (V):	50			100			200			300		
Operating Temp. Range (°C):	-55 to +125			-55 to +125			-55 to +125			-55 to +125		
Climatic Category:	55/125/55			55/125/55			55/125/55			55/125/55		
Insulation Resistance Dry Min (Mohms):	10000			10000			10000			10000		
Stability (%):	0.5			0.5			0.5			0.5		

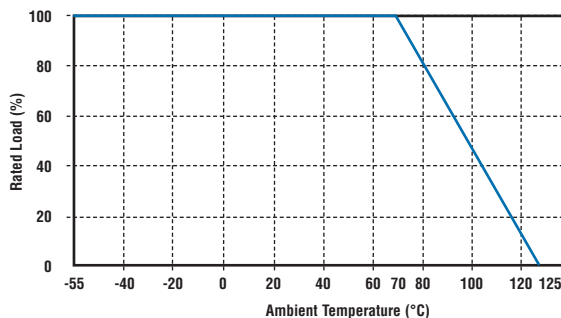
Characteristics - Environmental

Test Item	Specification		Test Method
	Tol. ≤0.05%	Tol. >0.05%	
Temperature Coefficient of Resistance	As Spec		MIL-STD-202F Method 304 +25/-55/+25/+125/+25°C
Short Time Overload	ΔR±0.05%	ΔR±0.5%	JIS-C-5202-5.5 RCWV*2.5 or Max Overloading Voltage for 5 seconds
	ΔR±0.5% for high power rating		
Dielectric Withstand Voltage	By type		MIL-STD-202F Method 301 Apply Max Overload Voltage for 1 minute
Insulation Resistance	>1000M Ω		MIL-STD-202F Method 302 Apply 100V <sub>DC</sub> for 1 minute
Thermal Shock	ΔR±0.05%	ΔR±0.25%	MIL-STD-202F Method 107G -55°C-150°C, 100 cycles
Load Life	ΔR±0.05%	ΔR±0.2%	MIL-STD-202F Method 108A RCWV, 70°C, 1.5 hours ON, 0.5 hours OFF, total 1000-1048 hours
	>7k Ω ΔR±0.5%		
Humidity (Steady State)	ΔR±0.05%	ΔR±0.3%	MIL-STD-202F Method 103B 40°C, 90-95%RH, RCWV 1.5 hours ON, 0.5 hours OFF, total 1000-1048 hours
	ΔR±0.5% for high power rating		
Resistance to Dry Heat	ΔR±0.05%	ΔR±0.2%	JIS-C-5202-7.2 96 hours @ +155°C without load
Low Temperature Operation	ΔR±0.05%	ΔR±0.2%	JIS-C-5202-7.1 1 hours, -65°C, followed by 45minutes of RCWV
	ΔR±0.5% for high power rating		
Bending Strength	ΔR±0.05%	ΔR±0.2%	JIS-C-5202-6.1.4 Bending Amplitude 3mm for 10 seconds
Solderability	95%min coverage		MIL-STD-202F Method 208H 235°C±5°C, 2±0.5 (sec)
Resistance to Soldering Heat	ΔR±0.05%	ΔR±0.2%	MIL-STD-202F Method 210E 260±5°C, 10±1 seconds

\*Storage Temperature :25±3°C; Humidity <80%RH

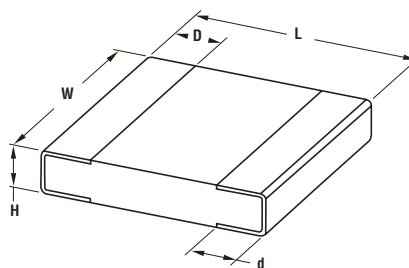
**Type RN73 Series**

**Power Derating Curve**



For temperatures in excess of 70°C the load shall be derated in accordance with this curve.

**Dimensions**



Type	L ±0.2	W ±0.2	D	d ± <sup>0.2</sup> / <sub>0.1</sub>	H ± 0.1
<b>RN73 1E</b>	1.0	0.5	0.2	0.2	0.35
<b>RN73 1J</b>	1.6	0.8	0.3 ± 0.2	0.3	0.4
<b>RN73 2A</b>	2.0	1.25	0.4 ± 0.2	0.3	0.5
<b>RN73 2B</b>	3.2	1.6	0.5 ± 0.3	0.4	0.6

**Packaging**

Type	E24 Pack Qty	E96 Pack Qty
<b>RN73 1E</b>	1000 / 5000 / 10000	250* / 1000 / 5000 / 10000
<b>RN73 1J</b>	1000 / 5000	250* / 1000 / 5000
<b>RN73 2A</b>	1000 / 5000	250* / 1000 / 5000
<b>RN73 2B</b>	5000	1000 / 5000

\*250 piece packs are supplied in vacuum sealed bags of cut tape length

**How to Order**

Common Part	Temp. Coefficient	Chip Size	Resistance Value	Tolerance	Pack Quantity
RN73 - High Precision Resistors (RoHS Compliant)	A - ±5ppm/°C *C - ±10ppm/°C	1E - 04:02 *1J - 06:03 *2A - 08:05 2B - 12:06	100 ohms (100 ohms) 100R 1 K ohm (1000 ohms) 1K0 100 K ohm (100000 ohms) 100K	A ±0.05% *B ±0.1% L ±0.01%	TG - Cut Tape Lengths (1E, 1J, 2A only) TDF - 1000 (1E, 1J, 2A only) TD - 5000
NR73 - High Precision Resistors (Non RoHS Compliant)	*Preferred Stock Item	*Preferred Stock Item		*Preferred Stock Item	