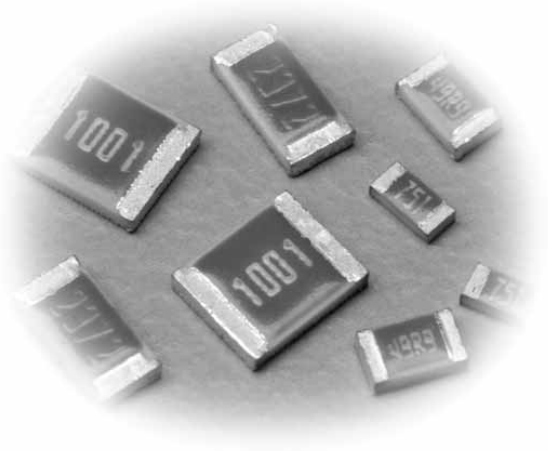
KOA SPEER ELECTRONICS, INC.

RN73

ultra precision 0.05%, 0.1%, 1% tolerance thin film chip resistor

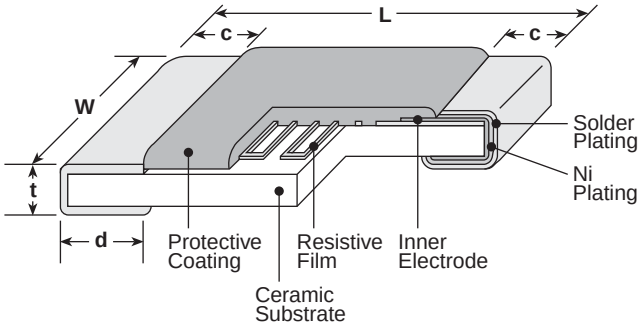


RoHS COMPLIANT

features

- Nickel chromium thin film resistor element
- Anti-leaching nickel barrier terminations
- Meets or exceeds EIA 576, MIL-R-55342F
- Marking: Four-digit, distinctive color identifiers (Only E-24 values are marked on 1J)
- Products with lead-free terminations meet RoHS requirements. Pb located in glass material, electrode and resistor element is exempt per Annex 1, exemption 5 of EU directive 2005/95/EC

dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm) L	W	c	d	t
RN73 1E (0402)	.039 +.004 -.002 (1.0 +0.1 -0.05)	.02±.002 (0.5±0.05)	.008±.004 (0.2±0.1)	.01 +.002 -.004 (0.25 +0.05 -0.1)	.014±.002 (0.35±0.05)
RN73 1J (0603)	.063±.008 (1.6±0.2)	.031±.004 (0.8±0.1)	.012±.004 (0.3±0.1)	.012±.004 (0.3±0.1)	.018±.004 (0.45±0.1)
RN73 2A (0805)	.079±.008 (2.0±0.2)	.049±.004 (1.25±0.1)	.016±.008 (0.4±0.2)	.012 +.008 -.004 (0.3 +0.2 -0.1)	.02±.004 (0.5±0.1)
RN73 2B (1206)	.126±.008 (3.2±0.2)	.063±.008 (1.6±0.2)	.02±.012 (0.5±0.3)	.016 +.008 -.004 (0.4 +0.2 -0.1)	.024±.004 (0.6±0.1)
RN73 2E (1210)		.098±.008 (2.5±0.2)			

ordering information

New Part #

RN73	2B	T	TE	1002	B	25
Type	Size	Termination Material	Packaging	Nominal Resistance	Tolerance	T.C.R. (ppm/°C)
	1E 1J 2A 2B 2E	T: Sn L: SnPb (Other termination styles may be available, please contact factory for options)	TP: 2mm pitch punched paper (0402 only) TD: 7" paper tape (0603, 0805, 1206 &1210) TDD: 10" paper tape (0603, 0805, 1206 &1210) TE: 7" punched plastic (0805, 1206 & 1210) TED: 10" punched plastic (0805, 1206 & 1210)	3 significant figures + 1 multiplier "R" indicates decimal on value <100Ω	A: ±0.05% B: ±0.1% C: ±0.25% D: ±0.5% F: ±1.0%	05 10 25 50 100

For further information on packaging, please refer to Appendix A.

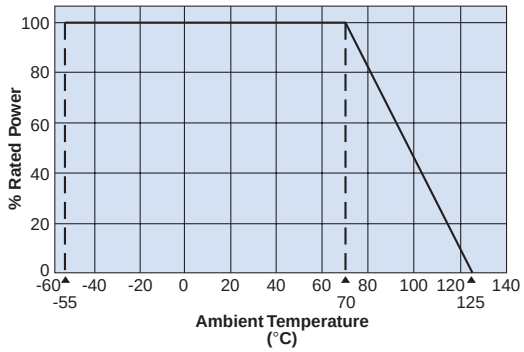
applications and ratings

Part Designation	Power Rating @ 70°C	T.C.R. (ppm/°C) Max.	Resistance Range E-24, E-96 (A±0.05%)	(B±0.1%)	(C±0.25%)	(D±0.5%)	(F±1.0%)	Absolute Maximum Working Voltage	Absolute Maximum Overload Voltage	Operating Temp. Range*
RN731E	1/16W (.063W)	±25	—	100Ω - 13kΩ	100Ω - 13kΩ	10Ω - 13KΩ		25V	50V	-55°C to +125°C
		±50		100Ω - 10KΩ	100Ω - 10KΩ	10Ω - 100KΩ				
RN731J	1/16W (.063W)	±5	1KΩ - 47KΩ	100Ω - 47kΩ	—			50V	100V	
		±10		100Ω - 47KΩ						
		±25		15Ω - 150kΩ		10Ω - 150kΩ				
		±50	—	15Ω - 330KΩ		10Ω - 330KΩ				
		±100		—	—	10Ω - 330kΩ				
RN732A	1/10W (.10W)	±5	100Ω - 100KΩ	100Ω - 100kΩ	—			100V	200V	
		±10		100Ω - 100KΩ						
		±25	51Ω - 100kΩ	15Ω - 1MΩ		10Ω - 1MΩ				
		±50	—							
		±100	—	—	—					
RN732B	1/8W (.125W)	±5	100Ω - 330kΩ	100Ω - 300kΩ	—			150V	300V	
		±10		100Ω - 300KΩ						
		±25	51Ω - 300kΩ	15Ω - 1MΩ		10Ω - 1MΩ				
		±50	—							
		±100	—	—	—					
RN732E	1/4W (.25W)	±10	100Ω - 510KΩ	100Ω - 510KΩ				200V	400V	
		±25	51Ω - 510kΩ	15Ω - 1MΩ		10Ω - 1MΩ				
		±50	—							
		±100	—	—	—					

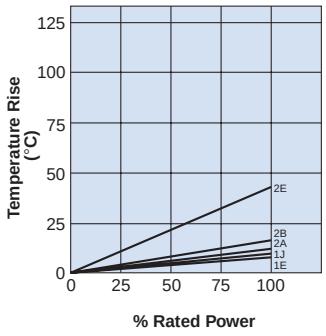
* +150°C operating temperature is available by special request.
E-192 Resistance Range available, contact factory for details

environmental applications

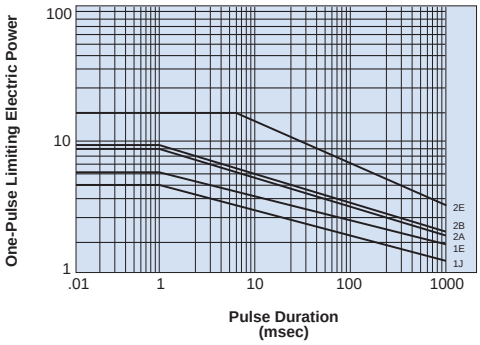
Derating Curve



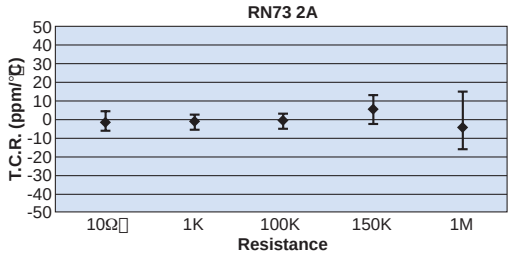
Surface Temperature Rise



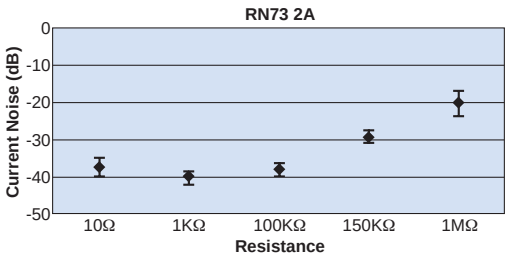
One-Pulse Limiting Electric Power



T.C.R. Characteristics



Noise Characteristics



For complete environmental specifications, please refer to pages 30-31.