

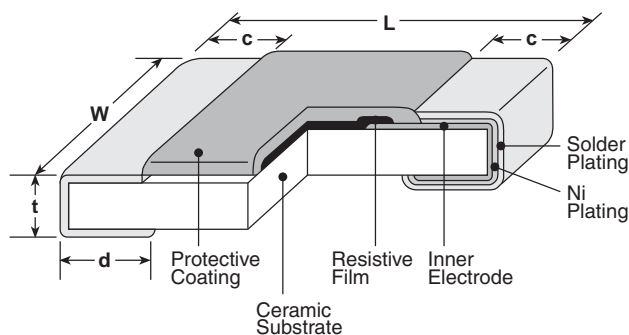
## general purpose 2%, 5% tolerance thick film chip resistor



### features

- RuO<sub>2</sub> thick film resistor element
- Anti-leaching nickel barrier terminations
- Meets or exceeds EIA 575, EIAJ RC 2690A, EIA PDP-100, MIL-R-55342F
- Marking: White three-digit on black protective coat  
No marking on 1F, 1H and 1E sizes
- Products with lead-free terminations meet EU 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
<b>NEW</b> 1F (01005)	.015±.001 (0.4±0.02)	.007±.001 (0.2±0.02)	.004±.001 (0.10±0.03)	.004±.001 (0.11±0.03)	.005±.001 (0.13±0.02)
1H (0201)	.024±.001 (0.6±0.03)	.012±.001 (0.3±0.03)	.004±.002 (0.1±0.05)	.006±.002 (0.15±0.05)	.009±.001 (0.23±0.03)
1E (0402)	.039 <sup>+0.004</sup> <sub>-0.002</sub> (1.0 <sup>+0.1</sup> <sub>-0.05</sub> )	.02±.002 (0.5±0.05)	.008±.004 (0.2±0.1)	.01 <sup>+0.002</sup> <sub>-0.004</sub> (0.25 <sup>+0.05</sup> <sub>-0.1</sub> )	.014±.002 (0.35±0.05)
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)
2A (0805)	.079±.008 (2.0±0.2)	.049±.004 (1.25±0.1)	.016±.008 (0.4±0.2)	.012 <sup>+0.008</sup> <sub>-0.004</sub> (0.3 <sup>+0.2</sup> <sub>-0.1</sub> )	.02±.004 (0.5±0.1)
2B (1206)	.126±.008 (3.2±0.2)	.063±.008 (1.6±0.2)	.02±.012 (0.5±0.3)	.016 <sup>+0.008</sup> <sub>-0.004</sub> (0.4 <sup>+0.2</sup> <sub>-0.1</sub> )	.024±.004 (0.6±0.1)
2E (1210)	.102±.008 (2.6±0.2)				
2H (2010)	.197±.008 (5.0±0.2)	.098±.008 (2.5±0.2)			
3A (2512)	.248±.008 (6.3±0.2)	.122±.008 (3.1±0.2)			

### ordering information

New Part #	RK73B	2B	T	TD	102	J
Type		Size	Termination Material	Packaging	Nominal Resistance	Tolerance
		1F 1H 1E 1J 2A 2B 2E 2H 3A	T: Sn (1F, 1H, 1E, 1J, 2A, 2B, 2E, 2H, 3A) L: SnPb (1E, 1J, 2A, 2B, 2E, 2H, 3A) (Other termination styles may be available, please contact factory for options)	TB: 7" 2mm pitch pressed paper (01005 only) TC: 7" 2mm pitch punched pressed paper (0201 only) TCD: 10" 2mm pitch punched pressed paper (0201 only) TP: 7" 2mm pitch punched paper (0402 & 0603) TD: 7" paper tape (0603, 0805, 1206 & 1210) TDD: 10" paper tape (0603, 0805, 1206 & 1210) TE: 7" punched plastic (0805, 1206, 1210, 2010 & 2512) TED: 10" punched plastic (0805, 1206, 1210, 2010 & 2512)	2 significant figures + 1 multiplier "R" indicates decimal on value <10Ω	G: ±2% J: ±5%

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

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

12/17/07

## applications and ratings

Part Designation*	Power Rating @ 70°C	T.C.R. (ppm/°C) Max.	Resistance Range E-24** (G±2%)	Resistance Range E-24** (J±5%)	Absolute Maximum Working Voltage	Absolute Maximum Overload Voltage	Operating Temperature Range***
NEW RK73B1F (01005)	1/32W (.03W)	±250	6.8KΩ - 1MΩ	6.8KΩ - 1MΩ	15V	30V	-55°C to +125°C
		±300	10Ω - 6.2K	10Ω - 6.2K			
RK73B1H (0201)	1/20W (.05W)	±200	10Ω - 10MΩ	10Ω - 10MΩ	25V	50V	
		±400	—	1Ω - 9.1Ω			
RK73B1E (0402)	1/16W (.063W)	±200	10Ω - 1MΩ	1Ω - 10MΩ	50V	100V	
RK73B1J (0603)	1/10W (.10W)	±400	1Ω - 9.1Ω	11MΩ - 22MΩ			
RK73B2A (0805)	1/8W (.125W)	±200	10Ω - 1MΩ	1Ω - 1MΩ	150V	300V	
		±400	1Ω - 9.1Ω 1.1MΩ - 10MΩ	1.1MΩ - 22MΩ			
RK73B2B (1206)	1/4W (.25W)	±200	10Ω - 5.6MΩ	1Ω - 5.6MΩ	200V	400V	-55°C to +155°C
		±400	1Ω - 9.1Ω 6.2MΩ - 10MΩ	6.2MΩ - 22MΩ			
RK73B2E (1210)	1/2W (.50W)	±200	10Ω - 1KΩ	1Ω - 1KΩ			
	1/3W (.33W)		1.1KΩ - 5.6MΩ	1.1KΩ - 5.6MΩ			
	1/2W (.50W)	±400	—	6.2MΩ - 10MΩ			
	1/3W (.33W)		—	6.2MΩ - 10MΩ			
RK73B2H (2010)	3/4W (.75W)	±200	10Ω - 5.6MΩ	1Ω - 5.6MΩ			
		±400	—	6.2MΩ - 22MΩ			
RK73B3A (2512)	1W	±200	10Ω - 5.6MΩ	1Ω - 5.6MΩ	200V (500V****)	400V (500V****)	
		±400	—	6.2MΩ - 22MΩ			

\* Parenthesis indicate EIA package size codes.

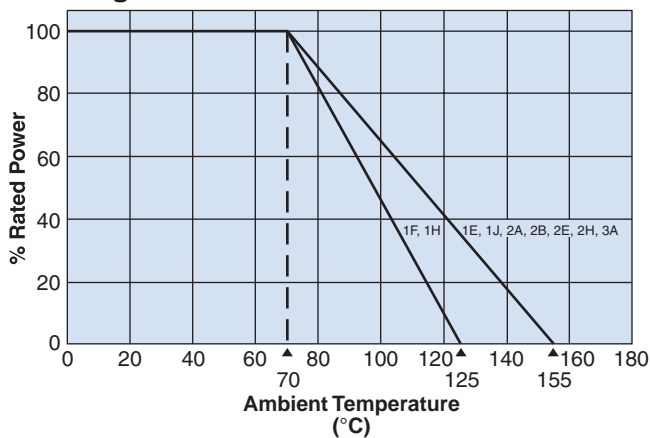
\*\* See Appendix D for available decade values.

\*\*\* IJ, 2A, 2B sizes available -55°C to +175°C (contact factory).

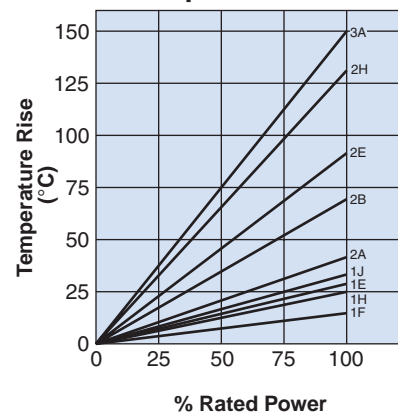
\*\*\*\* Please contact KOA Speer for the Max. working voltage and the Max. overload voltage.

## environmental applications

### Derating Curve



### Surface Temperature Rise



For complete environmental specifications, please refer to pages 34-35.