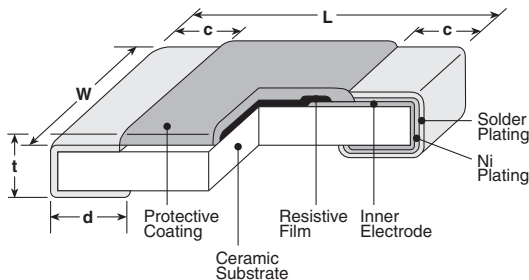


features

- High precision resistor with T.C.R. of ± 50 ppm/°C and tolerance of $\pm 0.25\%$, $\pm 0.5\%$ or $\pm 1\%$
- Marking: 1H, 1E: no marking on black protective coating
1J: no marking for E-96, white 3-digits for E-24, on dark blue protective coating
2A, 2B: white 4-digit on dark blue protective coating
- Products with lead-free terminations meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- AEC-Q200 Qualified: 0201 (1H), 0402 (1E), 0603 (1J), 0805 (2A), 1206 (2B)

dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm)				
	L	W	c	d	t
1H (0201)	.024 $\pm$.001 (0.6 $\pm$ 0.03)	.012 $\pm$.001 (0.3 $\pm$ 0.03)	.004 $\pm$.002 (0.1 $\pm$ 0.05)	.006 $\pm$.002 (0.15 $\pm$ 0.05)	.009 $\pm$.001 (0.23 $\pm$ 0.03)
1E (0402)	.039 $\begin{smallmatrix} +.004 \\ -.002 \end{smallmatrix}$ (1.0 $\begin{smallmatrix} +0.1 \\ -0.05 \end{smallmatrix}$)	.02 $\pm$.002 (0.5 $\pm$ 0.05)	.008 $\pm$.004 (0.2 $\pm$ 0.1)	.01 $\begin{smallmatrix} +.002 \\ -.004 \end{smallmatrix}$ (0.25 $\begin{smallmatrix} +0.05 \\ -0.1 \end{smallmatrix}$)	.014 $\pm$.002 (0.35 $\pm$ 0.05)
1J (0603)	.063 $\pm$.008 (1.6 $\pm$ 0.2)	.031 $\pm$.004 (0.8 $\pm$ 0.1)	.012 $\pm$.004 (0.3 $\pm$ 0.1)	.012 $\pm$.004 (0.3 $\pm$ 0.1)	.018 $\pm$.004 (0.45 $\pm$ 0.1)
2A (0805)	.079 $\pm$.008 (2.0 $\pm$ 0.2)	.049 $\pm$.004 (1.25 $\pm$ 0.1)	.016 $\pm$.008 (0.4 $\pm$ 0.2)	.012 $\begin{smallmatrix} +.008 \\ -.004 \end{smallmatrix}$ (0.3 $\begin{smallmatrix} +0.2 \\ -0.1 \end{smallmatrix}$)	.02 $\pm$.004 (0.5 $\pm$ 0.1)
2B (1206)	.126 $\pm$.008 (3.2 $\pm$ 0.2)	.063 $\pm$.008 (1.6 $\pm$ 0.2)	.02 $\pm$.012 (0.5 $\pm$ 0.3)	.016 $\begin{smallmatrix} +.008 \\ -.004 \end{smallmatrix}$ (0.4 $\begin{smallmatrix} +0.2 \\ -0.1 \end{smallmatrix}$)	.024 $\pm$.004 (0.6 $\pm$ 0.1)

ordering information

New Part #	RK73G	1J	T	TD	1003	F
Type		Size	Termination Material	Packaging	Nominal Resistance	Tolerance
		1H 1E 1J 2A 2B	T: Sn (1H, 1E, 1J, 2A, 2B) L: SnPb (1E, 1J, 2A, 2B)	TA: 0201 only: 1mm pitch pressed paper TC: 0201 only: 7" 2mm pitch pressed paper (TC: 10,000 pcs/reel, TCM: 15,000 pcs/reel) TPL: 0402 only: 2mm pitch punch paper TP: 0402, 0603, 0805: 7" 2mm pitch punch paper TD: 0603, 0805, 1206: 7" 4mm pitch punched paper TDD: 0603, 0805, 1206: 10" paper tape TE: 0805, 1206: 7" embossed plastic TED: 0805, 1206: 10" embossed plastic For further information on packaging, please refer to Appendix A	3 significant figures + 1 multiplier "R" indicates decimal on value <100Ω	New C: $\pm 0.25\%$ D: $\pm 0.5\%$ F: $\pm 1\%$

applications and ratings

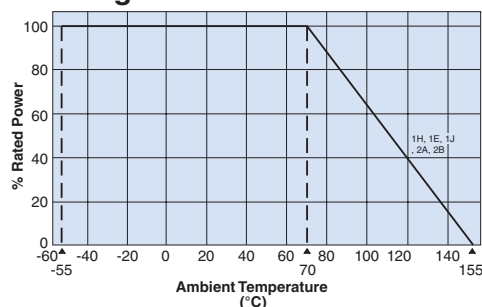
Part Designation*	Power Rating	Rated Ambient Temp.	Rated Terminal Part Temp.	T.C.R. (ppm/°C) Max.	Resistance Range			Absolute Maximum Working Voltage	Absolute Maximum Overload Voltage
					New E-24, E-96 (C±0.25%)	E-24, E-96 (D±0.5%)	E-24, E-96 (F±1%)		
RK73G1H (0201)	1/20W (.05W)	70°C	—	±50	—	100Ω - 1MΩ**	100Ω - 1MΩ**	25V	50V
RK73G1E (0402)	1/16W (.063W)		125°C		100Ω - 1MΩ	10Ω - 1MΩ	10Ω - 1MΩ	50V	100V
RK73G1J (0603)	1/10W (.10W)							75V	150V
RK73G2A (0805)	1/8W (.125W)							150V	200V
RK73G2B (1206)	1/4W (.25W)							200V	400V

Operating Temperature Range: -55°C ~ +155°C

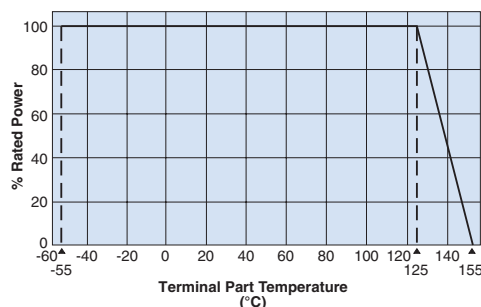
* Parentheses indicate EIA package size codes.

** RK73G1H available in E-24 decade values only

Derating Curve



For resistors operated at an ambient temperature of 70°C or above, a power rating shall be derated in accordance with the derating curve.



For resistors operated terminal part temperature of described for each size or above, a power rating shall be derated in accordance with derating curve. Please refer to "Introduction of the derating curves based on the terminal part temperature" in the beginning of our catalog before use.

environmental applications

Performance Characteristics

Parameter	Requirement $\Delta R \pm(\%+0.1\Omega)$		Test Method
	Limit	Typical	
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	1H: +25°C/+125°C, 1E, 1J, 2A, 2B: +25°C/-55°C and +25°C/+125°C
Overload (Short time)	±2%	±0.6%	Rated Voltage x 2.5 for 5 seconds (2B: Rated Voltage x 2 for 5 seconds)
Resistance to Solder Heat	±1%	±1%: 1H, ±0.4%: 1E, 1J, 2A, 2B	260°C ± 5°C, 10 seconds ± 1 second
Rapid Change of Temperature	±0.5%	±0.3%	-55°C (30 minutes), +125°C (30 minutes), 100 cycles
Moisture Resistance	±2%: 1J, 2A, 2B ±3%: 1H, 1E	±0.6%: 1J, 2A, 2B; ±1%: 1H, 1E	40°C ± 2°C, 90%-95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±2%: 1J, 2A, 2B ±3%: 1H, 1E	±0.6%: 1J, 2A, 2B; ±1%: 1H, 1E	70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±1%	±0.6%	+155°C, 1000 hours

For Surface Temperature Rise Graph see Environmental Applications. Additional environmental applications can also be found at www.koaspeer.com

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

11/16/16