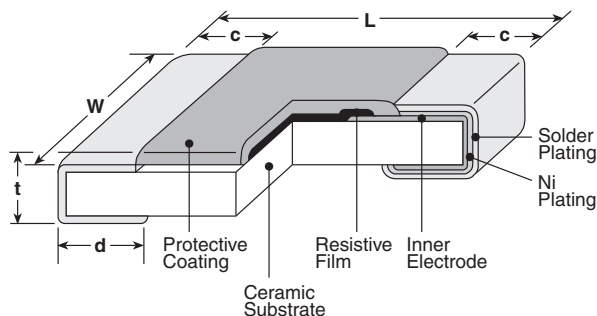


NEW


features

- Superior to RK73 series in maximum working voltage
- Suitable for flow and reflow solderings
- Marking: Black protective coating
- Products meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- Excellent anti-sulfuration characteristics due to using high sulfuration-proof inner top electrode material

dimensions and construction



Type (Inch Size Code)	Dimensions inches (mm)				
	L	W	c	d	t
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 ^{+0.008} _{-.004} (0.3 ^{+0.2} _{-.01})	.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 ^{+0.008} _{-.004} (0.4 ^{+0.2} _{-.01})	.024±.004 (0.6±0.1)
2H (2010)	.197±.008 (5.0±0.2)	.098±.008 (2.5±0.2)	.02±.012 (0.5±0.3)	.016 ^{+0.008} _{-.004} (0.4 ^{+0.2} _{-.01})	.024±.004 (0.6±0.1)
3A (2512)	.248±.008 (6.3±0.2)	.122±.008 (3.1±0.2)	.02±.012 (0.5±0.3)	.016 ^{+0.008} _{-.004} (0.4 ^{+0.2} _{-.01})	.024±.004 (0.6±0.1)

ordering information

New Part #	HV73	2B	RT	TD	1004	F
Type						
Size		1J: 0.1W 2A: 0.125W 2B: 0.25W 2H: 0.5W 3A: 1W				
Termination Material			RT: Sn			
Packaging				TD: 4mm pitch punched paper TE: 4mm pitch embossed plastic For further information on packaging, please refer to Appendix A		
Nominal Resistance					±0.5%, ±1%: 4 digits ±2%, ±5%: 3 digits	
Resistance Tolerance						D: ±0.5% F: ±1% G: ±2% J: ±5%

applications and ratings

Part Designation	Power Rating @ 70°C	T.C.R. (ppm/°C) Max.	Resistance Range (Ω)				Maximum Working Voltage	Maximum Overload Voltage (D.C.)*	Rated Terminal Part Temperature	Operating Temperature Range
			E-24/E-96 (D±0.5%)	E-24/E-96 (F±1%)	E-24 (G±2%)	E-24 (J±5%)				
1J	0.1W	±100**	—	10k - 10M	10k - 10M	10k - 10M	350V	500V*	80°C	-55°C to +155°C
2A	0.125W (0.25W)***	±100	100k - 1M	100k - 10M	100k - 10M	100k - 10M	400V	800V*	85°C	
		±200	—	—	—	11M - 51M				
2B	0.25W	±100	100k - 1M	100k - 10M	100k - 10M	100k - 10M	500V	1000V*	100°C	
		±200	—	—	—	11M - 51M				
2H	0.5W	±100	100k - 1M	100k - 10M	100k - 10M	100k - 10M	2000V (D.C.)	3000V*	90°C	
		±200	—	—	—	11M - 51M				
3A	1W	±100	43k - 1M	43k - 10M	43k - 10M	43k - 10M	3000V (D.C.)	4000V*	105°C	
		±200	—	11M - 20M	11M - 20M	11M - 51M				

Rated ambient temperature: +70°C

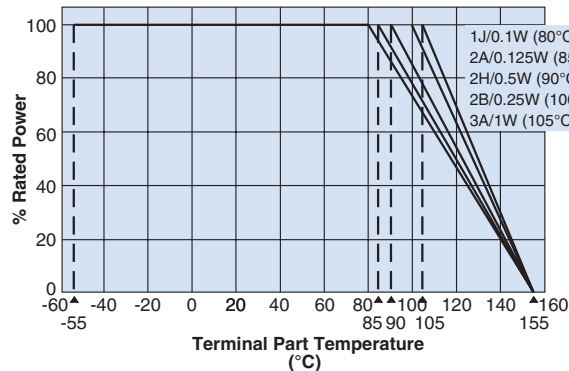
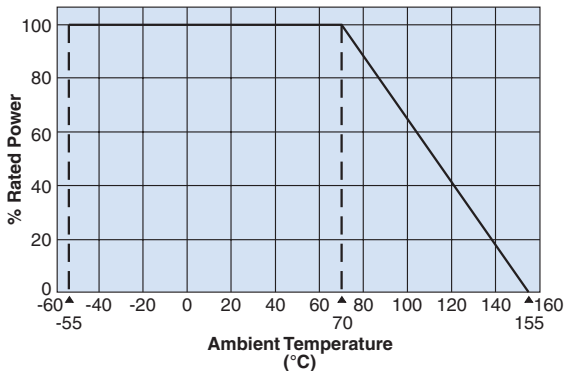
Rated voltage = $\sqrt{\text{Power rating} \times \text{resistance value}}$ or max. working voltage, whichever is lower

* Maximum Overload Voltage is specified by D.C. voltage ** Cold T.C.R. of 1.1MΩ ~ 10MΩ is +200x10⁻⁶/K

*** Please refer to the "Higher Power Ratings" statement in the beginning of the catalog. Contact KOA prior to usage.

environmental applications

Derating Curve



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

For resistors operated at a terminal part temperature of described for each size or above, a power rating shall be derated in accordance with the above derating curve.

Performance Characteristics

Parameter	Requirement $\Delta R \pm(\%+0.1\Omega)$		Test Method
	Limit	Typical	
Resistance	Within regulated tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	+25°C/-55°C and +25°C/+125°C
Overload (Short time)	±2%	±0.5%	Rated Voltage (D.C.) x 2.5 for 5 seconds
Resistance to Solder Heat	±1%	±0.5%	260°C ± 5°C, 10 seconds ± 1 second
Rapid Change of Temperature	±0.5%: (10kΩ≤R≤10MΩ) ±1%: (11MΩ≤R≤51MΩ)	±0.3%: (10kΩ≤R≤10MΩ) ±0.5%: (11MΩ≤R≤51MΩ)	-55°C (30 minutes), +125°C (30 minutes), 100 cycles
Moisture Resistance	±2%	±0.75%	40°C ± 2°C, 90%-95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±2%	±0.75%	70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±2%	±0.3%	+155°C, 1000 hours
Sulfuration Test	±5%	—	Soaked in industrial oil with 3.5% sulfur concentration 105°C ± 3°C, 500 hours

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.

12/05/14