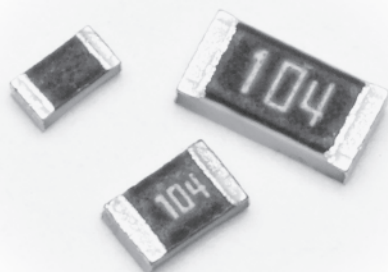
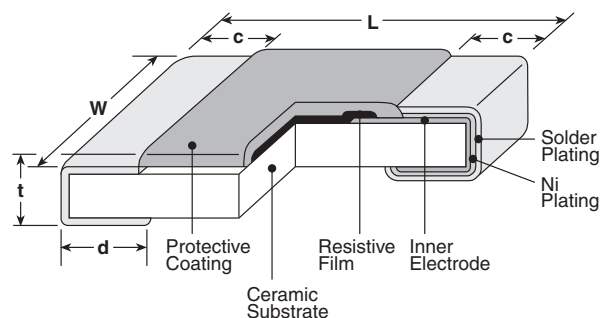


features

- Superior to RK73 series in maximum working voltage
- Marking: 1J: No marking, black protective coating
2A ~ 3A: White three-digit marking on black 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.



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 ^{+.008} _{-.004} (0.3 ^{+.02} _{-.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 ^{+.008} _{-.004} (0.4 ^{+.02} _{-.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 ^{+.008} _{-.004} (0.4 ^{+.02} _{-.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 ^{+.008} _{-.004} (0.4 ^{+.02} _{-.01})	.024±.004 (0.6±0.1)

ordering information

New Part #	HV73	2B	T	TD	1004	F
Type						
Size		1J: 0.1W 2A: 0.25W 2B: 0.25W 2H: 0.5W 3A: 1W				
Termination Material			T: Sn			
Packaging				TD: 0603, 0805, 1206: 7" 4mm pitch punched paper TDD: 0603, 0805, 1206: 10" paper tape TE: 2010 & 2512: 7" embossed plastic TED: 2010 & 2512: 10" embossed plastic For further information on packaging, please refer to Appendix A		
Nominal Resistance					±0.5%, ±1%: 3 significant figures + 1 multiplier ±2%, ±5%: 2 significant figures + 1 multiplier	
Resistance Tolerance						D: ±0.5% F: ±1% G: ±2% J: ±5%

applications and ratings

Part Designation	Power Rating @ 70°C	Rated Ambient Temp.	Rated Terminal Part Temp.	T.C.R. (ppm/°C) Max.	Resistance Range (Ω)				Absolute Maximum Working Voltage	Maximum Overload Voltage (D.C.)*	Operating Temp. 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	70°C	80°C	±100**	—	10k - 10M	10k - 10M	10k - 10M	350V	500V*	-55°C to +155°C
2A	0.25W	70°C	100°C	±100	100k - 1M	100k - 10M	100k - 10M	100k - 10M	400V	800V*	
				±200	—	—	—	11M - 51M			
2B	0.25W	70°C	100°C	±100	100k - 1M	100k - 10M	100k - 10M	100k - 10M	500V	1000V*	
				±200	—	—	—	11M - 51M			
2H	0.5W	70°C	90°C	±100	100k - 1M	100k - 10M	100k - 10M	100k - 10M	2000V (*D.C.)	3000V*	
				±200	—	—	—	11M - 51M			
3A	1W	70°C	105°C	±100	43k - 1M	43k - 10M	43k - 10M	43k - 10M	3000V (*D.C.)	4000V*	
				±200	—	10.2M - 20M	11M - 20M	11M - 51M			

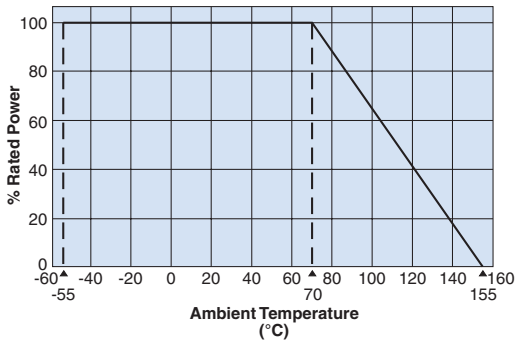
* AC Voltage Reference: When using for A.C. Voltage, use the peak A.C. Voltage, which should not exceed the Maximum DC Overload Voltage (Max. DC Voltage/√2) ** Cold T.C.R. of 1.02MΩ ~ 10MΩ is +200x10⁻⁶/K

If any questions should arise whether to use the "Rated Ambient Temperature" or the "Rated Terminal Part Temperature," please give priority to the "Rated Terminal Part Temperature." Prior to use and for more details refer to "Introduction of the derating curves on the terminal part temperature" in the beginning of the catalog.

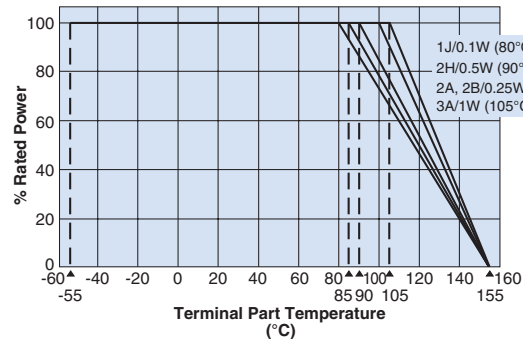
Rated voltage = √Power rating x resistance value or max. working voltage, whichever is lower

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.

Please refer to "Introduction of the derating curve based on the terminal part temperature" on the beginning of our catalog before use.

Performance Characteristics

Parameter	Requirement Δ R ±(%+0.1Ω)		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

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.

11/17/15