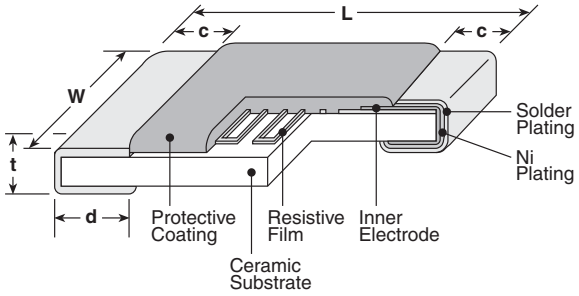
EU RoHS COMPLIANT

features

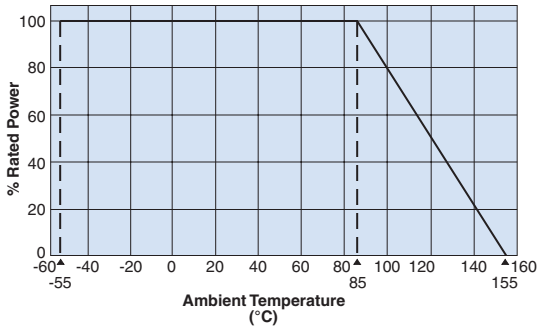
- High precision type ±0.05% is available with standard products
- Improved moisture resistance by special protective coating
- Rated up to +155°C
- Marking: Black coating
- Products with lead-free terminations meet EU RoHS requirements
- Rated ambient temperature: 85°C
- AEC-Q200 Qualified: 0402 (1E), 0603 (1J), 0805 (2A), 1206 (2B), 1210 (2E)

dimensions and construction



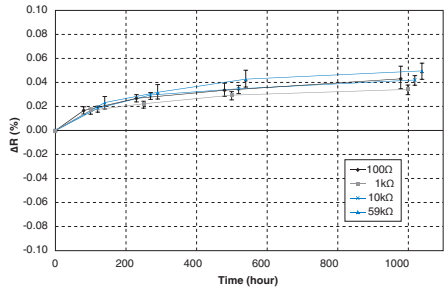
Type (Inch Size Code)	Dimensions inches (mm) L	W	c	d	t
1E (0402)	.039 +.004 -.002 (1.0 +0.1 -0.05)	.020±.002 (0.5±0.05)	.010±.004 (0.25±0.1)	.010 +.002 -.004 (0.25 +0.05 -0.1)	.014±.002 (0.35±0.05)
1J (0603)	.063±.008 (1.6±0.2)	.031±.004 (0.8±0.1)	.012±.004 (0.3±0.1)	.012±.004 (0.3±0.1)	.018±.004 (0.45±0.1)
2A (0805)	.079±.008 (2.0±0.2)	.049±.008 (1.25±0.2)	.016±.008 (0.4±0.2)	.012 +.008 -.004 (0.3 +0.2 -0.1)	.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 +0.2 -0.1)	.024±.004 (0.6±0.1)
2E (1210)		.098±.008 (2.5±0.2)			

Derating Curve



For resistors operated at an ambient temperature of 85°C or above, a power rating shall be derated in accordance with the above derating curve.

High Temperature Exposure (155°C, 1000 Hr) RN73H2A



ordering information

New Part #

RN73H	2B	T	TD	1002	B	25
Type	Size	Termination Material	Packaging	Nominal Resistance	Resistance Tolerance	T.C.R. (ppm/°C)
	1E: 0.063W 1J: 0.1W 2A: 0.125W 2B: 0.25W 2E: 0.25W	T: Sn	TP: 0402 only: 7" 2mm pitch punched paper TD: 0603, 0805, 1206, 1210: 7" 4mm pitch punched paper TDD: 0603, 0805, 1206, 1210: 10" paper tape TE: 0805, 1206, 1210: 7" embossed plastic TED: 0805, 1206, 1210: 10" embossed plastic For further information on packaging, please refer to Appendix A	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

12/09/13

KOA SPEER ELECTRONICS, INC.

RN73H

high heat resistance metal film chip resistor

applications and ratings

Part Designation	Power Rating @ 70°C	T.C.R. (ppm/°C) Max.	Resistance Range E-24, E-96, E-192* (A±0.05%)	(B±0.1%)	(C±0.25%)	(D±0.5%)	(F±1.0%)	Maximum Working Voltage	Maximum Overload Voltage	Operating Temp. Range
RN73H1E	1/16W (.063W)	±10	—	100Ω - 10kΩ	100Ω - 10kΩ	100Ω - 10kΩ	100Ω - 10kΩ	50V	75V	-55°C to +155°C
		±25	—	100Ω - 300kΩ	100Ω - 300kΩ	47Ω - 300kΩ	47Ω - 300kΩ			
		±50	—	100Ω - 300kΩ	100Ω - 300kΩ	10Ω - 300kΩ	10Ω - 300kΩ			
RN73H1J	1/10W (.10W)	±5	100Ω - 47kΩ	100Ω - 47kΩ	—	—	—	75V	150V	
		±10	100Ω - 59kΩ	100Ω - 59kΩ	100Ω - 59kΩ	100Ω - 59kΩ	100Ω - 59kΩ			
		±25	51Ω - 59kΩ	15Ω - 1MΩ	15Ω - 1MΩ	10Ω - 1MΩ	10Ω - 1MΩ			
		±50	—	15Ω - 1MΩ	15Ω - 1MΩ	10Ω - 1MΩ	10Ω - 1MΩ			
		±100	—	—	—	10Ω - 1MΩ	10Ω - 1MΩ			
RN73H2A	1/8W (.125W)	±5	100Ω - 100kΩ	100Ω - 100kΩ	—	—	—	100V	200V	
		±10	100Ω - 100kΩ	100Ω - 100kΩ	100Ω - 100kΩ	100Ω - 100kΩ	100Ω - 100kΩ			
		±25	51Ω - 100kΩ	15Ω - 1MΩ	15Ω - 1MΩ	3Ω - 1MΩ	3Ω - 1MΩ			
		±50	—	15Ω - 1MΩ	15Ω - 1MΩ	3Ω - 1MΩ	3Ω - 1MΩ			
		±100	—	—	—	3Ω - 1MΩ	3Ω - 1MΩ			
RN73H2B	1/4W (.25W)	±5	100Ω - 300kΩ	100Ω - 300kΩ	—	—	—	150V	300V	
		±10	100Ω - 300kΩ	100Ω - 300kΩ	100Ω - 300kΩ	100Ω - 300kΩ	100Ω - 300kΩ			
		±25	51Ω - 300kΩ	15Ω - 1MΩ	15Ω - 1MΩ	10Ω - 1MΩ	10Ω - 1MΩ			
		±50	—	15Ω - 1MΩ	15Ω - 1MΩ	10Ω - 1MΩ	10Ω - 1MΩ			
		±100	—	—	—	10Ω - 1MΩ	10Ω - 1MΩ			
RN73H2E	1/4W (.25W)	±10	100Ω - 510kΩ	100Ω - 510kΩ	100Ω - 510kΩ	100Ω - 510kΩ	100Ω - 510kΩ	200V	400V	
		±25	51Ω - 510kΩ	15Ω - 1MΩ	15Ω - 1MΩ	10Ω - 1MΩ	10Ω - 1MΩ			
		±50	—	15Ω - 1MΩ	15Ω - 1MΩ	10Ω - 1MΩ	10Ω - 1MΩ			
		±100	—	—	—	10Ω - 1MΩ	10Ω - 1MΩ			

* No marking on E-192 values

environmental applications

Performance Characteristics

Parameter	Requirement Δ R ±(%+0.05Ω) Limit	Typical	Test Method
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	+25°C/-55°C and +25°C/+155°C**
Overload (Short time)	±0.05%	±0.01%	Rated Voltage x 2.5 or Max. overload volume, whichever is less for 5 seconds
Resistance to Solder Heat	±0.05%*	±0.01%	260°C ± 5°C, 10 seconds ± 1 second
Rapid Change of Temperature	±0.1%*	±0.02%	1E, 1J, 2A: -55°C (30 minutes), +155°C (30 minutes), 1000 cycles 2B, 2E: -55°C (30 minutes), +155°C (30 minutes), 500 cycles
Moisture Resistance	±0.1%*	±0.05%	85°C ± 2°C, 85%±5%RH, 1000 hours; 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 85°C	±0.1%*	±0.05%	85°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±0.1%*	±0.05%	+155°C, 1000 hours

* Depends on resistance value, please contact KOA Speer for details.

** Test conditions differs depending on resistance value

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

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

KOA Speer:

RN73H1JTTD8451B10 RN73H1JTTD8060B10 RN73H1JTTD4020B10 RN73H1JTTD3651B10
RN73H1JTTD2552B10 RN73H1JTTD2000B10 RN73H1JTTD1691B10 RN73H1JTTD1472B10
RN73H1JTTD1272B10 RN73H1JTTD1000B10 RN73H1JTTD1002B25 RN73H2ATTD1002B25
RN73H2BTTD1002B25 RN73H2ETTD1002B25 RN73H2ATTD3322B25 RN73H2BTTD1002F25
RN73H2BTTD1003F25 RN73H2BTTD2001F25 RN73H2BTTD2002F25 RN73H2BTTD2051F25
RN73H2BTTD2871F25 RN73H2BTTD3241F25 RN73H2BTTD5111F25 RN73H2BTTD5902F25
RN73H2BTTD1001F25 RN73H2ATTD6812B25 RN73H2ATTD9760B25 RN73H2ATTD4531B25
RN73H2ATTD1741B25 RN73H2ATTD1211B25 RN73H2ATTD1000B25 RN73H1JTTD2000B25
RN73H1JTTD1001B25 RN73H2BTTD3012F25 RN73H2BTTD9091F25 RN73H1JTTD1001B05
RN73H1JTTD1002B05 RN73H1JTTD1202B05 RN73H1JTTD1912B05 RN73H1JTTD2492B05
RN73H1JTTD2612B10 RN73H1JTTD3001B05 RN73H2ATTD6042B05 RN73H1JTTD4990B05
RN73H2ATTD5362B05 RN73H2ATTD1001B25 RN73H2ATTD7501B25 RN73H2ATTD3242B25
RN73H2ATTD2942B25 RN73H2ATTD2612B25 RN73H2ATTD1000B10 RN73H2ATTD2001B10
RN73H1JTTD5621B25 RN73H1JTTD2492B25 RN73H1JTTD4992B25 RN73H1JTTD1503B25
RN73H2ATTD2102B10 RN73H1JTTD5691D50 RN73H1JTTD1022B25 RN73H1JTTD49R9D25
RN73H1JTTD1692B25 RN73H2ATTD4701B25 RN73H2ATTD1211B10 RN73H1JTTD2671B50
RN73H1ETTP2001B25 RN73H2ATTD1002B10 RN73H1JTTD9101B10 RN73H2BTTD8662F25
RN73H2ETTD3243B25 RN73H1ETTP1002B25 RN73H1ETTP3401B25 RN73H1JTTD1103B25
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