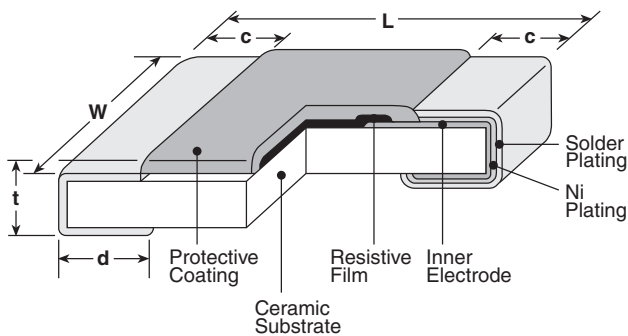


### features

- Silver element
- 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), 1210(2E), 2010(2H/W2H), 2512(3A/W3A)

### dimensions and construction



| Type<br>(Inch Size Code) | Dimensions inches (mm)                                                            |                          |                          |                                                                                   |                           |
|--------------------------|-----------------------------------------------------------------------------------|--------------------------|--------------------------|-----------------------------------------------------------------------------------|---------------------------|
|                          | L                                                                                 | W                        | c                        | d                                                                                 | t                         |
| <b>1F</b><br>(01005)     | .016±.0008<br>(0.4±0.02)                                                          | .008±.0008<br>(0.2±0.02) | .004±.001<br>(0.10±0.03) | .004±.001<br>(0.11±0.03)                                                          | .005±.0008<br>(0.13±0.02) |
| <b>1H</b><br>(0201)      | .024±.001<br>(0.6±0.03)                                                           | .012±.001<br>(0.3±0.03)  | .004±.002<br>(0.1±0.05)  | .006±.002<br>(0.15±0.05)                                                          | .009±.001<br>(0.23±0.03)  |
| <b>1E</b><br>(0402)      | .039 <sup>+0.004</sup> <sub>-.002</sub><br>(1.0 <sup>+0.1</sup> <sub>-.05</sub> ) | .02±.002<br>(0.5±0.05)   | .008±.004<br>(0.2±0.1)   | .01 <sup>+0.002</sup> <sub>-.004</sub><br>(0.25 <sup>+0.05</sup> <sub>-.1</sub> ) | .014±.002<br>(0.35±0.05)  |
| <b>1J</b><br>(0603)      | .063±.008<br>(1.6±0.2)                                                            | .031±.004<br>(0.8±0.1)   | .012±.004<br>(0.3±0.1)   | .012±.004<br>(0.3±0.1)                                                            | .018±.004<br>(0.45±0.1)   |
| <b>2A</b><br>(0805)      | .079±.008<br>(2.0±0.2)                                                            | .049±.004<br>(1.25±0.1)  | .016±.008<br>(0.4±0.2)   | .012 <sup>+0.008</sup> <sub>-.004</sub><br>(0.3 <sup>+0.2</sup> <sub>-.1</sub> )  | .02±.004<br>(0.5±0.1)     |
| <b>2B</b><br>(1206)      | .126±.008<br>(3.2±0.2)                                                            | .063±.008<br>(1.6±0.2)   |                          | .016 <sup>+0.008</sup> <sub>-.004</sub><br>(0.4 <sup>+0.2</sup> <sub>-.1</sub> )  |                           |
| <b>2E</b><br>(1210)      |                                                                                   | .102±.008<br>(2.6±0.2)   |                          |                                                                                   |                           |
| <b>2H</b><br>(2010)      |                                                                                   | .098±.008<br>(2.5±0.2)   |                          |                                                                                   |                           |
| <b>W2H</b><br>(2010)     | .197±.008<br>(5.0±0.2)                                                            | .098±.008<br>(2.5±0.2)   | .02±.012<br>(0.5±0.3)    | .026±.006<br>(0.65±0.15)                                                          | .024±.004<br>(0.6±0.1)    |
| <b>3A</b><br>(2512)      | .248±.008<br>(6.3±0.2)                                                            | .122±.008<br>(3.1±0.2)   |                          | .016 <sup>+0.008</sup> <sub>-.004</sub><br>(0.4 <sup>+0.2</sup> <sub>-.1</sub> )  |                           |
| <b>W3A</b><br>(2512)     |                                                                                   |                          |                          | .026±.006<br>(0.65±0.15)                                                          |                           |

### ordering information

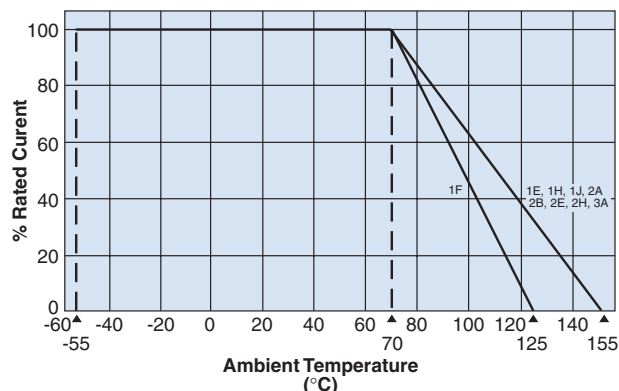
| RK73Z | 2B                                                               | T                                                                                                                                                                    | TD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type  | Size                                                             | Termination Material                                                                                                                                                 | Packaging                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|       | 1F<br>1H<br>1E<br>1J<br>2A<br>2B<br>2E<br>W2H<br>W3A<br>2H<br>3A | T: Sn<br>(1F, 1H, 1E, 1J, 2A, 2B, 2E, 2H/W2H, 3A/W3A)<br>Contact factory for below options:<br>L: SnPb<br>(1E, 1J, 2A, 2B, 2E, 2H, 3A only)<br>G: Au<br>(1E, 1J, 2A) | TX: 01005 only: 4mm width - 1mm pitch embossed plastic<br>TBL: 01005 only: 2mm pitch pressed paper<br>TC: 0201 only: 7" 2mm pitch pressed paper<br>(TC: 10,000 pcs/reel, TCM: 15,000 pcs/reel)<br>TPL: 0402 only: 2mm pitch punch paper<br>TP: 0402, 0603, 0805: 7" 2mm pitch punch paper<br>TD: 0603, 0805, 1206, 1210: 7" 4mm pitch punched paper<br>TE: 0805, 1206, 1210, 2010 & 2512: 7" embossed plastic<br>For further information on packaging, please refer to Appendix A |

## applications and ratings

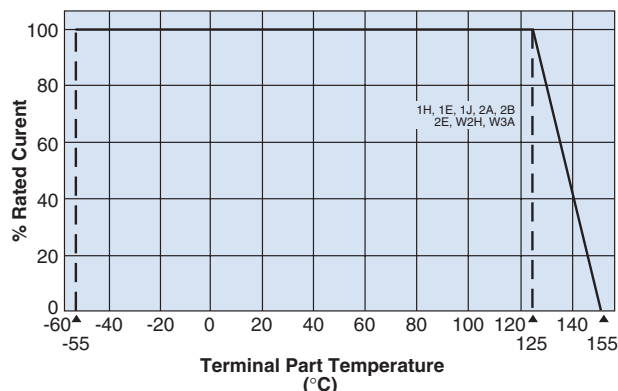
| Part Designation                                 | Rated Ambient Temperature | Rated Terminal Part Temperature | Maximum Continuous Current @ 70°C | Maximum Overload Current @ 70°C (for < 1 second) | Maximum Resistance | Operating Temperature Range |
|--------------------------------------------------|---------------------------|---------------------------------|-----------------------------------|--------------------------------------------------|--------------------|-----------------------------|
| RK73Z1F                                          | 70°C                      | —                               | 0.5 Amps                          | 1.0 Amp Max.                                     | 50mΩ               | -55°C to +125°C             |
| RK73Z1H                                          |                           | 125°C                           | 0.5 Amps                          | 1.0 Amp Max.                                     |                    | -55°C to +155°C             |
| RK73Z1E<br>RK73Z1J                               |                           |                                 | 1.0 Amps                          | 2 Amp Max.                                       |                    |                             |
| RK73Z2A                                          |                           |                                 | 2.0 Amps                          | 5 Amp Max.                                       |                    |                             |
| RK73Z2B<br>RK73Z2E<br>RK73Z2H/W2H<br>RK73Z3A/W3A |                           |                                 | 2.0 Amps                          | 10 Amp Max.                                      |                    |                             |

## environmental applications

### Derating Curve



For resistors operated at an ambient temperature of 70°C or above, a current 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 derating curve.

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

## Performance Characteristics

| Parameter                   | Requirement               |                          | Test Method                                                                          |
|-----------------------------|---------------------------|--------------------------|--------------------------------------------------------------------------------------|
|                             | Limit                     | Typical                  |                                                                                      |
| Resistance                  | 50mΩ Max. after the test  | 15mΩ Max. after the test | 25°C                                                                                 |
| Overload (Short time)       | 50mΩ Max. after the test  | 18mΩ Max. after the test | Maximum overload current for 5 seconds , 1 cycle                                     |
| Resistance to Solder Heat   | 50mΩ Max. after the test  | 15mΩ Max. after the test | 260°C ± 5°C, 10 seconds ± 1 second                                                   |
| Rapid Change of Temperature | 50mΩ Max. after the test  | 15mΩ Max. after the test | -55°C (30 minutes), +125°C (30 minutes), 100 cycles                                  |
| Moisture Resistance         | 100mΩ Max. after the test | 18mΩ Max. after the test | 40°C ± 2°C, 90%-95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle                      |
| Endurance at 70°C           | 100mΩ Max. after the test | 18mΩ Max. after the test | 70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle                                  |
| High Temperature Exposure   | 100mΩ Max. after the test | 15mΩ Max. after the test | +125°C, 1000 hours: 1F<br>+155°C, 1000 hours: 1H, 1E, 1J, 2A, 2B, 2E, W2H/2H, W3A/3A |