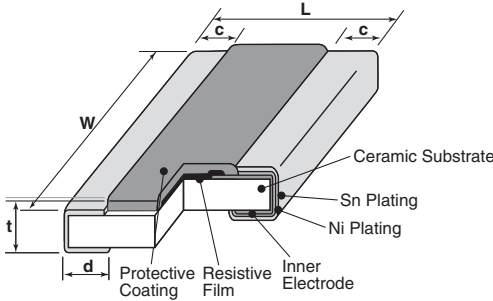




features

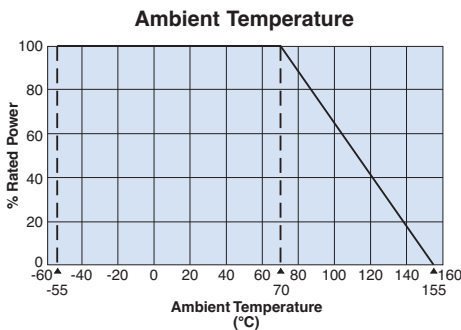
- Anti-sulfuration type, wide-side termination (reverse-geometry) type flat chip resistor
- Excellent anti-sulfuration characteristic due to using high sulfuration-proof inner top electrode material
- Suitable for both flow and reflow solderings
- Products meet EU RoHS requirements. EU RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.
- AEC-Q200 Tested

dimensions and construction

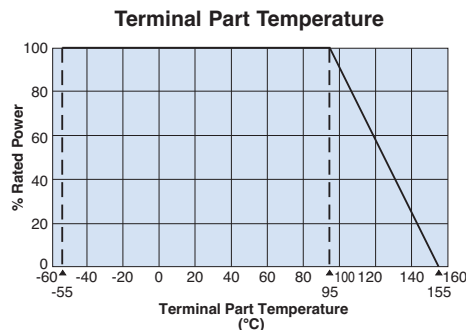


| Type (Inch Size Code) | Dimensions inches (mm) | | | | |
|--------------------------|--------------------------------------|---------------------------------------|---------------------------------------|--|--------------------------------------|
| | L | W | c | d | t |
| 2B15 (0612) | $.063 \pm .008$ ($1.6 \pm .02$) | $.126 \pm .012$ ($3.2 \pm .03$) | $.012 \pm .008$ (0.3 ± 0.2) | $.018 \pm .006$ (0.45 ± 0.15) | $.024 \pm .004$ (0.6 ± 0.1) |
| 2H2 (1020) | $.098 \pm .008$ ($2.5 \pm .02$) | $.197 \pm .008$ ($5.0 \pm .02$) | $.016 \pm .008$ (0.4 ± 0.2) | $.030 \pm .006$ (0.75 ± 0.15) | $.024 \pm .004$ (0.6 ± 0.1) |
| 3A3 (1225) | $.122 \pm .004$ ($3.1 \pm .01$) | $.248 \pm .006$ (6.3 ± 0.15) | $.018 \pm .008$ (0.45 ± 0.2) | $.030 \pm .006$ (0.75 ± 0.15) | $.024 \pm .004$ (0.6 ± 0.1) |

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 terminal 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.

ordering information

| | | | | | | |
|----------------|----------------------------------|-----------------------|-----------------------------|---|--|-----------------------------|
| WK73R | 2B15 | R | T | TD | 10R0 | F |
| Type | Size | Characteristic | Termination Material | Packaging | Nominal Resistance | Resistance Tolerance |
| WK73S WK73R | 2B15: 1.5W 2H2: 2W 3A3: 3W | R: Anti-Sulfur | T: Sn | TD: 0612: 7" 4mm pitch punched paper TE: 1020, 1225: 7" 4mm pitch embossed plastic For further information on packaging, please refer to Appendix A | ±1%: 3 significant figures + 1 multiplier "R" indicates decimal on value <100Ω ±5%: 2 significant figures + 1 multiplier "R" indicates decimal on values <10Ω | F: ±1% J: ±5% |

Contact us when you have control request for environmental hazardous material other than the substance specified by EU RoHS.

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

11/27/23

applications and ratings

| Part Designation | Power Rating | Rated Ambient Temp. | Rated Terminal Part Temp. | T.C.R. (X 10 ⁻⁶ /K) | Resistance Range (Ω) | | Maximum Working Voltage | Maximum Overload Voltage | Operating Temperature Range |
|------------------|-------------------|---------------------|---------------------------|--------------------------------|----------------------|------------|-------------------------|--------------------------|-----------------------------|
| | | | | | F±1% E-24 · E-96 | J±5% E-24 | | | |
| WK73S2B15RT | 1.5W ¹ | 70°C | 95°C | ±100 | 1 ~ 9.76 | 1 ~ 9.1 | 200V | 400V | -55°C to +155°C |
| | | | | ±150 | 0.3 ~ 0.976 | 0.3 ~ 0.91 | | | |
| WK73R2B15RT | 1.5W ¹ | 70°C | 95°C | ±100 | 10 ~ 9.76k | 10 ~ 9.1k | 200V | 400V | |
| | | | | ±100 | 1 ~ 9.76 | 1 ~ 9.1 | | | |
| WK73S2H2RT | 2.0W ¹ | 70°C | 95°C | ±100 | 0.2 ~ 0.976 | 0.2 ~ 0.91 | 200V | 400V | |
| | | | | ±150 | 10 ~ 430k | 10 ~ 430k | | | |
| WK73R2H2RT | 2.0W ¹ | 70°C | 95°C | ±100 | 10 ~ 430k | 10 ~ 430k | 200V | 400V | |
| | | | | ±200 | 432k - 1M | 470k - 1M | | | |
| WK73S3A3RT | 3.0W ¹ | 70°C | 95°C | ±100 | 1 ~ 9.76 | 1 ~ 9.1 | 200V | 400V | |
| | | | | ±100 | 10 ~ 330k | 10 ~ 330k | | | |
| WK73R3A3RT | 3.0W ¹ | 70°C | 95°C | ±100 | 10 ~ 330k | 10 ~ 330k | 200V | 400V | |
| | | | | ±200 | 332k - 1M | 360k - 1M | | | |

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

*1 If you use at the rated power, please keep the condition that the terminal of the resistor is below the rated terminal part temperature.

Please refer to the derating curves based on the terminal temperature of right side on the next page.

For more details, please refer to “Introduction of the derating curves based on the terminal part temperature” on the beginning of our catalog.

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

environmental applications

Performance Characteristics

| Parameter | Requirement $\Delta R \pm(\%+0.005\Omega)$ | | Test Method |
|-----------------------------|--|---------|--|
| | Limit | Typical | |
| Resistance | Within specified tolerance | — | 25°C |
| T.C.R. | Within specified T.C.R. | — | +25°C/-55°C and +25°C/+125°C |
| Overload (Short time) | ±2% | ±0.2% | Rated voltage x 2.0 for 5 seconds |
| Resistance to Solder Heat | ±1% | ±0.2% | 260°C ± 5°C, 10 seconds ± 1 second |
| Bending Test | ±1% | ±0.1% | Holding point 90mm, Bending 1 time, Bending 5mm |
| Rapid Change of Temperature | ±2% | ±1% | -55°C (30 minutes), +125°C (30 minutes), 1000 cycles |
| Moisture Resistance | ±2% | ±0.2% | 40°C ± 2°C, 90%-95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle |
| Endurance at 70°C | ±2% | ±0.2% | 70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle |
| High Temperature Exposure | ±1% | ±0.2% | +155°C, 1000 hours |
| Sulfuration Test | ±5% | ±0.2% | Soaked in industrial oil with 3.5% sulfur concentration 105°C ± 3°C, 500 hours |

Please refer to conventional products for characteristic data such as temperature rise.