

current sense



### features

- Wide terminal type flat chip resistor
- High reliability and performance with T.C.R.  $\pm 75 \times 10^{-6}/K$ , resistance tolerance  $\pm 1\%$
- Suitable for flow and reflow solderings
- This product meets 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<br>(Inch Size Code) | Dimensions inches (mm)  |  |                        |                          |                        |
|--------------------------|-------------------------|--|------------------------|--------------------------|------------------------|
|                          | L                       | W  | c                      | d                        | t                      |
| <b>2B</b><br>(0612)      | .063±.006<br>(1.6±0.15) | .126±.012<br>(3.2±.3)<br><small>+0.04<br/>+0.1</small> | .016±.008<br>(0.4±0.2) | .018±.006<br>(0.45±0.15) | .024±.004<br>(0.6±0.1) |
| <b>2B15</b><br>(0612)    | .063±.006<br>(1.6±0.15) | .126±.012<br>(3.2±.3)<br><small>+0.04<br/>+0.1</small> | .016±.008<br>(0.4±0.2) | .018±.006<br>(0.45±0.15) | .024±.004<br>(0.6±0.1) |

### Derating Curve



For resistors operated at an ambient temperature of 70°C or above, the 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, the power rating shall be derated in accordance with the above derating curve. Please refer to the "Introduction of the derating curves based on terminal part temperature" in the beginning of the catalog.



### ordering information

|             |                      |                      |  |   |                      |
|-------------|----------------------|----------------------|--|---|----------------------|
| <b>WU73</b> | <b>2B</b>            | <b>T</b>             | <b>TD</b>  | <b>10L0</b>   | <b>F</b>             |
| Type        | Size                 | Termination Material | Packaging  | Nominal Resistance  | Resistance Tolerance |
| WU73        | 2B: 1W<br>2B15: 1.5W | T : Sn               | TD: 7" 4mm pitch punched paper<br>For further information on packaging, please refer to Appendix A | 4 digits: all values less than 100mΩ are expressed in mΩ with "L" as decimal. Ex: 10mΩ = 10L0 | F: ±1%               |

## applications and ratings

| Part Designation | Power Rating | Rated Ambient Temperature | Rated Terminal Part Temperature | T.C.R. (X 10 <sup>-6</sup> /K) | Resistance Range (Ω)<br>E-24, 25m, 50m | Resistance Tolerance | Operating Temperature Range |
|------------------|--------------|---------------------------|---------------------------------|--------------------------------|--|----------------------|-----------------------------|
| WU732B           | 1.0W         | 70°C                      | 115°C                           | ±100                           | 10m~12m                                | F: ±1%               | -55°C to +155°C             |
|                  |              |                           |                                 | ±75                            | 13m~27m                                |                      |                             |
|                  |              |                           |                                 | ±100                           | 30m~100m                               |                      |                             |
| WU732B15         | 1.5W         | 70°C                      | 95°C                            | ±100                           | 10m~12m                                | F: ±1%               | -55°C to +155°C             |
|                  |              |                           |                                 | ±75                            | 13m~27m                                |                      |                             |
|                  |              |                           |                                 | ±100                           | 30m~100m                               |                      |                             |

Rated voltage =  $\sqrt{\text{Power rating} \times \text{resistance value}}$

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.

## environmental applications

### Temperature Rise

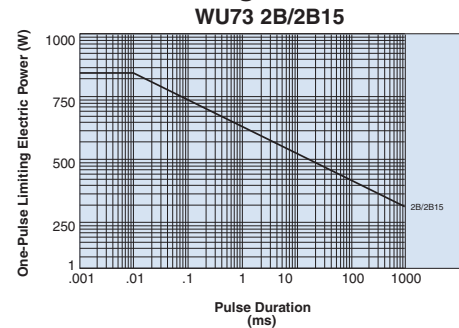


Regarding the temperature rise, the value of the temperature varies per conditions and board for use since the temperature is measured under our measuring conditions.

Measurement condition  
Room temperature: 25°C  
PCB: FR-4t = 1.6mm  
Cu foil thickness: 35μm



### One-Pulse Limiting Electric Power



The maximum applicable voltage is equal to the max. overload voltage. Please contact factory for resistance characteristics of continuous applied pulse.

## 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 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%  | ±0.3%   | -55°C (30 minutes), +125°C (30 minutes), 1000 cycles            |
| Moisture Resistance         | ±2%  | ±0.1%   | 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%  | ±0.1%   | +155°C, 1000 hours  |

Additional environmental applications can also be found at [www.koaspeer.com](http://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.

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