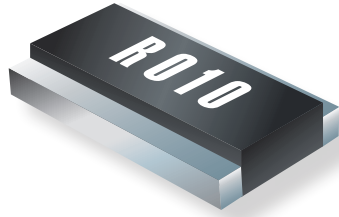




PRODUCT CHANGE NOTIFICATION

RESISTORS



Bourns® Model CRK0612 and CRK0815 Series Surface Mount Metal Strip Current Sense Resistors - Corrections to Data Sheets

TCR Values, Supported Resistance Values, Pad & Pkg. Dimensions, and Other Electrical Characteristics

Riverside, California - October 24, 2024 – Effective immediately, Bourns has corrected the data sheet Temperature Coefficient of Resistance (TCR) values and pad dimensions for the [Model CRK0612 and CRK0815 Series Surface Mount Metal Strip Current Sense Resistors](#). The TCR values increased from ± 50 PPM/ $^{\circ}$ C to ± 100 PPM/ $^{\circ}$ C. The pad dimension length (L) decreased from 0.85 mm to 0.7 mm. The prior data sheets showed incorrect TCR values and pad dimensions. A list of affected part numbers is included on [page 3](#).

Previous Data Sheet: TCR and Resistance Values (Model CRK0612 & CRK0815 Series)

| Specification | Model CRK0612 Series | Model CRK0815 Series |
|---|---|---|
| Temperature Coefficient of Resistance (TCR) Value | ± 50 PPM/ $^{\circ}$ C | |
| Resistance Values | 1 m Ω , 3 m Ω , 5 m Ω , 10 m Ω | 3 m Ω , 4 m Ω , 5 m Ω , 10 m Ω |

Revised Data Sheet: TCR and Resistance Values (Model CRK0612 & CRK0815 Series)

| Specification | Model CRK0612 Series | Model CRK0815 Series |
|---|------------------------------|------------------------------|
| Temperature Coefficient of Resistance (TCR) Value | ± 100 PPM/ $^{\circ}$ C | |
| Resistance Values | 1 m Ω ~ 10 m Ω | 1 m Ω ~ 30 m Ω |

(Continued)

Users should verify that the described changes will not impact the performance of the product in their specific applications.

N2448

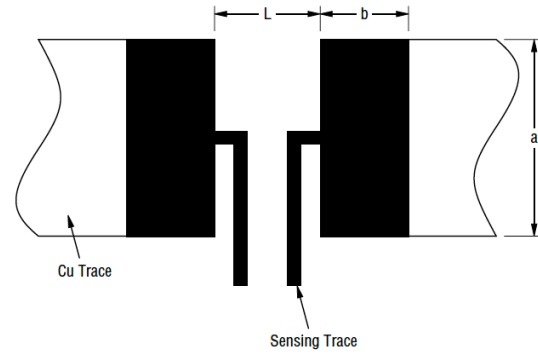
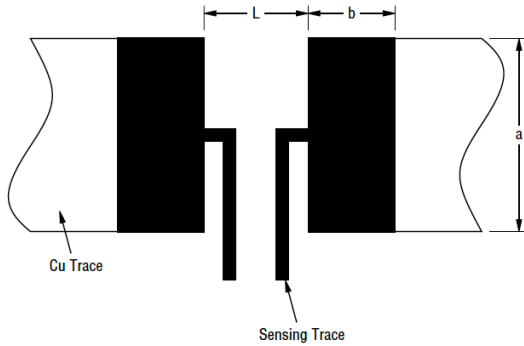
Previous Data Sheet:
Recommended Pad Layout "L" Dimension was 0.85 mm
(Model CRK0612 Series)

Revised Data Sheet:
Recommended Pad Layout "L" Dimension is 0.70 mm
(Model CRK0612 Series)

Recommended Solder Pad Dimensions



Recommended Solder Pad Dimensions



| | a | b | L |
|---------|----------------|----------------|-----------------|
| CRK0612 | 3.80 (0.15) | 0.70 (0.03) | 0.85 (0.033) |

| | a | b | L |
|---------|----------------|----------------|----------------|
| CRK0612 | 3.80 (0.15) | 0.70 (0.03) | 0.70 (0.03) |

The revised data sheet also includes more stringent tests for high temperature exposure, temperature cycling and correction of a typographical error in packaging information.

Previous Data Sheet:
High Temperature Exposure Tested at 155 °C (Model CRK0612 & CRK0815 Series)

| | | | |
|---------------------------|---|------------------|----------|
| High Temperature Exposure | IEC 60115-1- 4.23.2 JIS-C5201-4.23.2 | 155 °C, 1000 hrs | < ±0.5 % |
|---------------------------|---|------------------|----------|



Revised Data Sheet:
High Temperature Exposure Tested at 170 °C (Model CRK0612 & CRK0815 Series)

| | | | |
|---------------------------|---|------------------|----------|
| High Temperature Exposure | IEC 60115-1- 4.23.2 JIS-C5201-4.23.2 | 170 °C, 1000 hrs | < ±0.5 % |
|---------------------------|---|------------------|----------|

Previous Data Sheet:
Test Cycles (Model CRK0612 & CRK0815 Series)

| | | | |
|-------------------|------------------------------------|--|----------|
| Temperature Cycle | IEC 60115-1-4.19 JIS-C5201-4.19 | -55 °C & +155 °C, 100 cycle, 15 min per extreme condition | < ±0.5 % |
|-------------------|------------------------------------|--|----------|

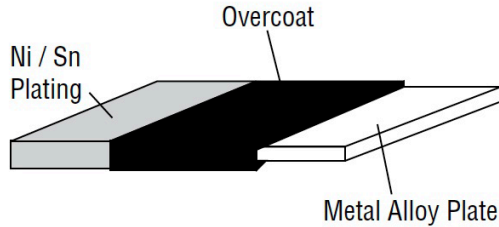


Revised Data Sheet:
Test Cycles (Model CRK0612 & CRK0815 Series)

| | | | |
|-------------------|------------------------------------|-----------------------------|----------|
| Temperature Cycle | IEC 60115-1-4.19 JIS-C5201-4.19 | -55 °C & +155 °C, 300 cycle | < ±0.5 % |
|-------------------|------------------------------------|-----------------------------|----------|

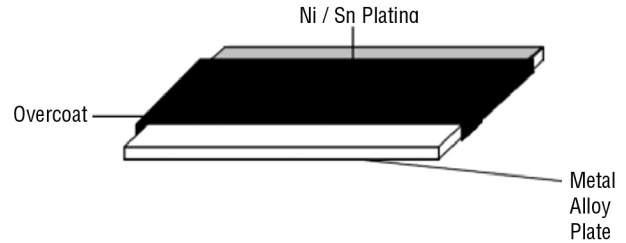
Previous Data Sheet:

Construction Graphic Error (Model CRK0612 & CRK0815 Series)



Revised Data Sheet:

Construction Graphic Update (Model CRK0612 & CRK0815 Series)



Previous Data Sheet:

Packaging Dimension Errors

- Dimension D₀ (Model CRK0612 & CRK0815 Series)**
- Dimension F (Model CRK0815 Series)**
- Dimension A (Model CRK0815 Series)**
- Dimension P₂ (Model CRK0815 Series)**

| Model | A | B | W | F | E | P ₁ | P ₂ | P ₀ | D ₀ |
|----------------------|---|---|--|---|---|---|---|---|---|
| CRK0612 (paper tape) | $\frac{2.00 \pm 0.15}{(.079 \pm .006)}$ | $\frac{3.60 \pm 0.20}{(.142 \pm .008)}$ | $\frac{8.00 \pm 0.20}{(.315 \pm .008)}$ | $\frac{3.50 \pm 0.05}{(.138 \pm .002)}$ | | | | | |
| CRK0815 (embossed) | $\frac{2.60 \pm 0.15}{(.102 \pm .006)}$ | $\frac{4.50 \pm 0.20}{(.177 \pm .008)}$ | $\frac{12.00 \pm 0.20}{(.472 \pm .008)}$ | $\frac{5.50 \pm 0.05}{(.217 \pm .002)}$ | $\frac{1.75 \pm 0.10}{(.069 \pm .004)}$ | $\frac{4.00 \pm 0.10}{(.157 \pm .004)}$ | $\frac{2.00 \pm 0.10}{(.079 \pm .004)}$ | $\frac{4.00 \pm 0.10}{(.157 \pm .004)}$ | $\frac{1.55 \pm 0.10}{(.061 \pm .004)}$ |



Revised Data Sheet:

Packaging Dimension Corrections

- Dimension D₀ (Model CRK0612 & CRK0815 Series)**
- Dimension F (Model CRK0815 Series)**
- Dimension A (Model CRK0815 Series)**
- Dimension P₂ (Model CRK0815 Series)**

| Model | A | B | W | F | E | P ₁ | P ₂ | P ₀ | D ₀ |
|----------------------|---|---|--|---|---|---|---|---|---|
| CRK0612 (paper tape) | $\frac{2.00 \pm 0.15}{(.079 \pm .006)}$ | $\frac{3.60 \pm 0.20}{(.142 \pm .008)}$ | $\frac{8.00 \pm 0.20}{(.315 \pm .008)}$ | $\frac{3.50 \pm 0.05}{(.138 \pm .002)}$ | | | $\frac{2.00 \pm 0.05}{(.079 \pm .002)}$ | | $\frac{1.50 +0.1/-0}{(.059 +.004/-0)}$ |
| CRK0815 (embossed) | $\frac{2.60 \pm 0.20}{(.102 \pm .008)}$ | $\frac{4.50 \pm 0.20}{(.177 \pm .008)}$ | $\frac{12.00 \pm 0.20}{(.472 \pm .008)}$ | $\frac{5.50 \pm 0.05}{(.217 \pm .002)}$ | $\frac{1.75 \pm 0.10}{(.069 \pm .004)}$ | $\frac{4.00 \pm 0.10}{(.157 \pm .004)}$ | $\frac{2.00 \pm 0.20}{(.079 \pm .008)}$ | $\frac{4.00 \pm 0.10}{(.157 \pm .004)}$ | $\frac{1.55 \pm 0.05}{(.061 \pm .002)}$ |

Affected Part Numbers - CRK0612 Series

| | | | | |
|------------------|------------------|------------------|------------------|------------------|
| CRK0612-FZ-R001E | CRK0612-FZ-R003E | CRK0612-FZ-R005E | CRK0612-FZ-R007E | CRK0612-FZ-R009E |
| CRK0612-FZ-R002E | CRK0612-FZ-R004E | CRK0612-FZ-R006E | CRK0612-FZ-R008E | CRK0612-FZ-R010E |

Affected Part Numbers - CRK0815 Series

| | | | | |
|------------------|------------------|------------------|------------------|------------------|
| CRK0815-FZ-R001E | CRK0815-FZ-R003E | CRK0815-FZ-R005E | CRK0815-FZ-R007E | CRK0815-FZ-R009E |
| CRK0815-FZ-R002E | CRK0815-FZ-R004E | CRK0815-FZ-R006E | CRK0815-FZ-R008E | CRK0815-FZ-R010E |

(Continued)



This notification does not involve any change to the form, fit, function, quality or reliability of the resistors themselves. This notification contains corrections to the data sheets to match the actual resistor specifications.

If you have any questions or need additional information, please feel free to contact [Customer Service/Inside Sales](#).