

# Flat Type Low Resistance Chip Resistor

Hokuriku Electric Industry Co.,Ltd

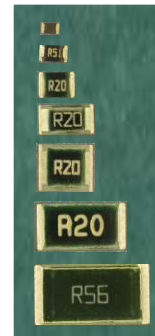


## 【Model Number】

LCR\*\*

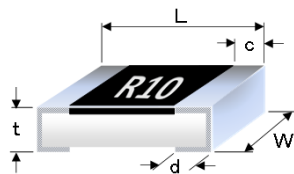
## 【Features】

- Due to metal-glazed thick film material utilized, it has excellent heat resistance, weatherability.
- Reflow , Flow soldering are applicable.
- Europe RoHS compliant product.



## 【Dimensions】

(Unit: mm)



| Model No. | L               | W               | t               | c         | d         |
|-----------|-----------------|-----------------|-----------------|-----------|-----------|
| LCR10     | 1.00±0.05       | 0.50±0.05       | 0.35±0.05       | 0.20±0.10 | 0.25±0.10 |
| LCR16     | 1.60±0.15       | 0.80+0.20/-0.10 | 0.50+0.15/-0.05 | 0.25±0.20 | 0.25±0.20 |
| LCR20     | 2.00+0.20/-0.10 | 1.25+0.20/-0.10 | 0.50+0.15/-0.05 | 0.40±0.20 | 0.40±0.20 |
| LCR32     | 3.20+0.10/-0.15 | 1.60+0.10/-0.15 | 0.55+0.15/-0.05 | 0.50±0.20 | 0.50±0.20 |
| LCR35     | 3.20+0.10/-0.15 | 2.60+0.10/-0.15 | 0.55+0.15/-0.05 | 0.50±0.20 | 0.50±0.20 |
| LCR50     | 5.00±0.15       | 2.50±0.15       | 0.56±0.15       | 0.60±0.25 | 0.60±0.25 |
| LCR64     | 6.30±0.15       | 3.20±0.15       | 0.56±0.15       | 0.60±0.25 | 0.60±0.25 |

## 【Designation】

LCR16 - R20 J V

| ① Model No. |      | ② Resistance Value                     |            | ③ Resistance Tolerance |           | ④ Packing Form |             |
|-------------|------|--|------------|------------------------|-----------|----------------|-------------|
| Model No.   | Size | Marking                                | Resistance | Symbol                 | Tolerance | Symbol         | Form        |
| LCR10       | 1005 | R20                                    | 200mΩ      | F                      | ±1.0%     | V              | Paper tape  |
| LCR16       | 1608 | R20=0.20Ω=200mΩ<br>R is decimal point. |            | G                      | ±2.0%     | E              | Emboss tape |
| LCR20       | 2012 |  |            | J                      | ±5.0%     | B              | Bulk        |
| LCR32       | 3216 |  |            |                        |           |                |             |
| LCR35       | 3225 |  |            |                        |           |                |             |
| LCR50       | 5025 |  |            |                        |           |                |             |
| LCR64       | 6432 |  |            |                        |           |                |             |

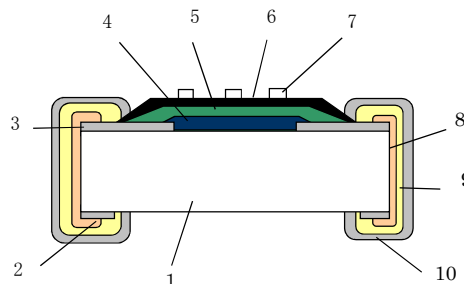
## 【Specification】

| Model No. | Rated power (W) at 70°C | Tolerance        | Range (Ω) | TCR (ppm/°C) | Max. Working voltage(V) | Max. Overload voltage |
|-----------|-------------------------|------------------|-----------|--------------|-------------------------|-----------------------|
| LCR10     | 0.100                   | G(±2%)<br>J(±5%) | 0.20~0.91 | ±300         | V=√(P·R)                | 100V                  |
| LCR16     | 0.100                   | G(±2%)<br>J(±5%) | 0.20~0.91 | ±300         |                         |                       |
| LCR20     | 0.125                   | F(±1%)           | 0.20~0.91 | ±200         |                         |                       |
|           |                         | G(±2%)<br>J(±5%) | 0.10~0.91 |              |                         |                       |
| LCR32     | 0.250                   | F(±1%)           | 0.20~0.91 | ±100         |                         |                       |
|           |                         | G(±2%)<br>J(±5%) | 0.10~0.91 |              |                         |                       |
| LCR35     | 0.500                   | G(±2%)<br>J(±5%) | 0.10~0.91 | ±200         |                         |                       |
|           |                         | F(±1%)           | 0.20~0.91 |              |                         |                       |
| LCR50     | 0.750                   | F(±1%)           | 0.20~0.91 | ±100         |                         |                       |
|           |                         | G(±2%)<br>J(±5%) | 0.10~0.91 |              |                         |                       |
| LCR64     | 1.000                   | F(±1%)           | 0.20~0.91 | ±200         |                         |                       |
|           |                         | G(±2%)<br>J(±5%) | 0.10~0.91 |              |                         |                       |

\* Operating temperature range: -55~+155 °C

## 【Structure】

| No. | Element Name       |
|-----|--------------------|
| 1   | Ceramic substrate  |
| 2   | Back electrode     |
| 3   | Top electrode      |
| 4   | Resistive element  |
| 5   | Protective coat I  |
| 6   | Protective coat II |
| 7   | Marking            |
| 8   | Side electrode     |
| 9   | Ni plating         |
| 10  | Sn plating         |



\* Design specification are subject to change without prior notice. Please check before purchase and use.