

bussed square corner resistor array

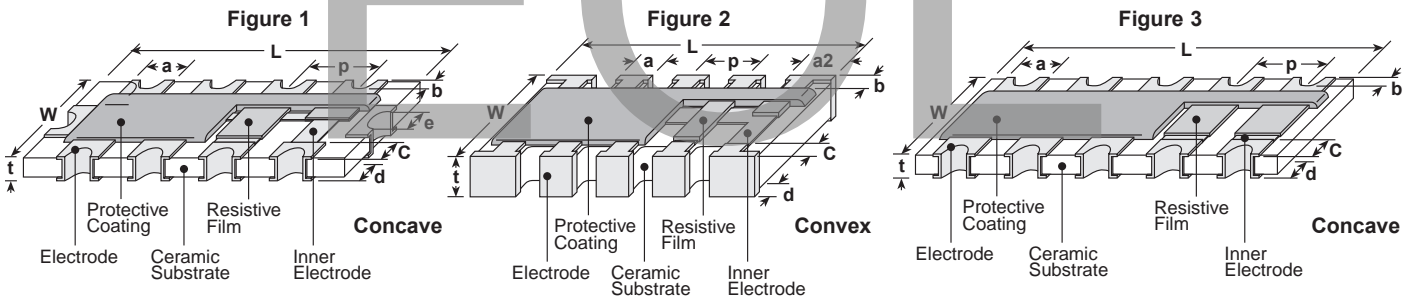


features

- Manufactured to type RK73 standards
- Concave or convex terminations
- Less board space than individual chips
- Eight bussed resistor elements included in one array
- 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.

dimensions and construction

| Size Code | Figure No. | Dimensions inches (mm) | | | | | | | | | | |
|-----------|------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|-------------------------|----------------|
| | | L | W | C | d | e | t | a (top) | a2 | a (bot.) | b | p |
| 1J10VK | 2 | .126±.004 (3.2±0.1) | .063±.004 (1.6±0.1) | .012±.008 (0.3±0.2) | .012±.004 (0.3±0.1) | — | .020±.004 (0.5±0.1) | .016±.004 (0.4±0.1) | — | .012 (0.3) | — | .025 (0.64) |
| 1J10K | 2 | .126±.004 (3.2±0.1) | .063±.004 (1.6±0.1) | .012±.008 (0.3±0.2) | .012±.004 (0.3±0.1) | — | .020±.004 (0.5±0.1) | .016±.004 (0.4±0.1) | .022±.004 (0.55±0.1) | .012±.008 (0.3±0.2) | — | .025 (0.64) |
| 1J10Y | 1 | .126±.006 (3.2±0.15) | .063±.006 (1.6±0.15) | .008±.004 (0.2±0.1) | .014±.004 (0.35±0.1) | .016±.006 (0.4±0.15) | .022±.004 (0.55±0.1) | .013±.006 (0.33±0.15) | — | .012±.004 (0.3±0.1) | .004 (0.1) | .031 (0.8) |
| 2A10Y | | .157±.008 (4.0±0.2) | .083±.008 (2.1±0.2) | .010±.008 (0.25±0.2) | .016±.008 (0.4±0.2) | .020±.008 (0.5±0.2) | .024±.004 (0.6±0.1) | .020±.008 (0.5±0.2) | — | .016±.006 (0.4±0.15) | .006±.004 (0.15±0.1) | .031 (0.8) |
| 2B10V | 3 | .252±.008 (6.4±0.2) | .122±.008 (3.1±0.2) | .014±.006 (0.35±0.15) | .022±.006 (0.55±0.15) | — | .024±.004 (0.6±0.1) | .024±.004 (0.6±0.1) | — | .024±.006 (0.6±0.15) | .006±.004 (0.15±0.1) | 0.05 (1.27) |
| 2B10 | | | | | | | | | | | | |



ordering information

| Convex: | CND | 1J | 10 | V | K | T | TD | 103 | J |
|---------|-----|------|----------|--|-----------------|--|-------------------|--------------------------------------|-----------|
| Type | | Size | Elements | Circuit Symbol | Terminal Symbol | Termination Material | Packaging | Nominal Resistance | Tolerance |
| | | 1J | 10 | V: Reverse common electrode Blank: Standard | K: Convex type | T: Sn (Other termination styles may be available, please contact factory for options) | TD: 7" paper tape | 2 significant figures + 1 multiplier | J: ±5% |

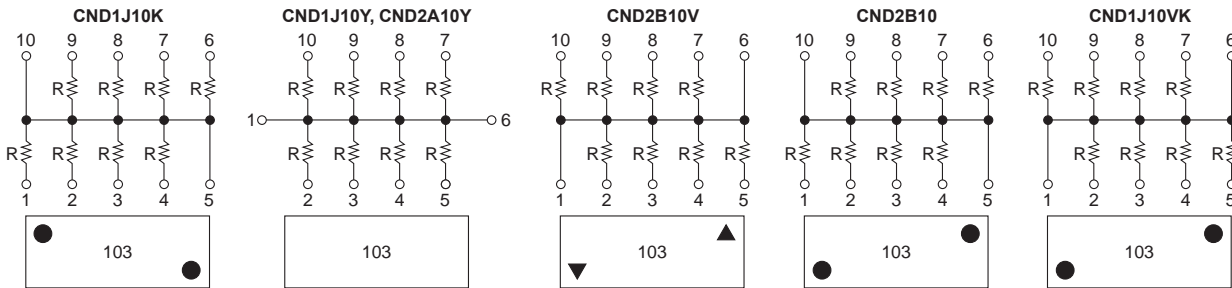
| Concave: | CND | 2B | 10 | V | T | TE | 103 | J |
|----------|-----|----------------|----------|--|--|--|--------------------------------------|-----------|
| Type | | Size | Elements | Circuit Symbol | Termination Material | Packaging | Nominal Resistance | Tolerance |
| | | 1J 2A 2B | 10 | V: Reverse common electrode Y: Side common electrode Blank: Standard | T: Sn (Other termination styles may be available, please contact factory for options) | TD: 7" paper tape TE: 7" embossed plastic | 2 significant figures + 1 multiplier | J: ±5% |

For further information on packaging, please refer to Appendix A.

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

12/01/17

circuit schematics and markings



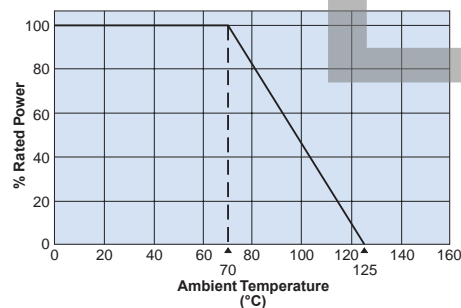
applications and ratings

| Part Designation | Power Rating @ 70°C (Per Element) | T.C.R. (ppm/°C) Max. | Resistance Range E-12 | Resistance Tolerance | Absolute Maximum Working Voltage | Maximum Overload Voltage (5 Secs. Max.) | Rated Ambient Temperature | Operating Temperature Range |
|------------------|-----------------------------------|----------------------|-----------------------|----------------------|----------------------------------|---|---------------------------|-----------------------------|
| CND1J10VK | .031 | ±200 | 47Ω - 39kΩ | J: ±5% | 25V | 50V | +70°C | -55°C to +125°C |
| CND1J10K | | | 22Ω - 39kΩ | | | | | |
| CND1J10Y | .05 | | 100Ω - 100kΩ | | 50V | | | |
| CND2A10Y | .063 | | | | | | | |
| CND2B10V | | | | | | | | |
| CND2B10 | | | | | | | | |

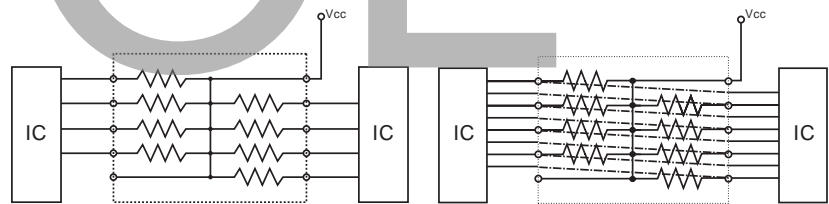
* Note that network resistors generate higher heat rather than single flat chip resistors even under rated power output

environmental applications

Derating Curve



Circuit Board Application



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.

Performance Characteristics

| Parameter | Requirement $\Delta R \pm(\%+0.1\Omega)$ | | Test Method |
|-----------------------------|--|----------------------------------|--|
| | Limit | Typical | |
| Resistance | Within specified tolerance | — | 25°C |
| T.C.R. | Within specified T.C.R. | — | +25°C/-55°C, +25°C/+125°C |
| Overload (Short time) | ±2.0% | ±0.5% | Rated voltage x 2.5 for 5 seconds |
| Resistance to Solder Heat | ±1.0% | Convex: ±0.2% Concave: ±0.25% | 260°C ± 5°C, 10 seconds ± 1 second |
| Rapid Change of Temperature | ±1.0% | Convex: ±0.1% Concave: ±0.25% | -55°C (30 minutes), +125°C (30 minutes), 5 cycles |
| Moisture Resistance | ±5.0% | ±1.0% | 40°C ± 2°C, 90 - 95% RH, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle |
| Endurance at 70°C | ±5.0% | Convex: ±0.5% Concave: ±1% | 70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle |
| High Temperature Exposure | ±1.0% | ±0.2% | +125°C, 1000 hours |

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