



Features

- RoHS compliant*
- Convex and concave terminals
- 2, 4 or 8 isolated elements available
- Resistance tolerance $\pm 1\%$ and $\pm 5\%$
- Resistance range: 10 ohms to 1 megohm

CAT/CAY 16 Series - Chip Resistor Arrays

Specifications

| Requirement | Characteristics | Test Method |
|-------------------------|---|--|
| Short Time Overload | $\pm 1\%$ ($\pm 2\%$ for CAT16-F8, -J8 & CAY16-J8) | Rated Voltage X 2.5, 5 seconds |
| Soldering Heat | $\pm 1\%$ | 260 °C $\pm 5\%$ °C, 10 seconds ± 1 second |
| Temperature Cycling (5) | $\pm 1\%$ | 125 °C (30 minutes) - normal (15 minutes) -30 °C (30 minutes) - normal (15 minutes) |
| Moisture Load Life | $\pm 2\%$ ($\pm 3\%$ for CAT16-F8, -J8 & CAY16-J8) | 1000 hours |
| Load Life | $\pm 2\%$ ($\pm 3\%$ for CAT16-F8, -J8 & CAY16-J8) | 1000 hours |

Characteristics

| Characteristics | CAT16/CAY16 |
|--|--------------------------------|
| Number of Elements | 2 (J2), 4 (F4, J4), 8 (F8, J8) |
| Power Rating Per Resistor | 62 mW (31 mW for CAY16-J8) |
| Resistance Tolerance | $\pm 1\%$, $\pm 5\%$ |
| Resistance Range: E24 (J), E96 + E24 (F) Zero-Ohm Jumper < 0.05 ohm | 10 ohms - 1 megohm |
| Max. Working Voltage | 50 V (25 V for CAY16-J8) |
| Operating Temp. Range | -55 °C - 125 °C |

How To Order

CA Y 16 - 103 J 4 LF

Chip Arrays _____

Type _____

- CAT16 = Concave Terminations
- CAY16 = Convex Terminations

Resistance Code _____

- 103 = 10 K ohms
- 1003 = 100 K ohms (1 % tolerance)
- 000 = Zero-ohm

Resistance Tolerance _____

- J = $\pm 5\%$ (Use "J" for zero-ohm jumper)
- F = $\pm 1\%$ (4 resistor package and CAT16-F8)

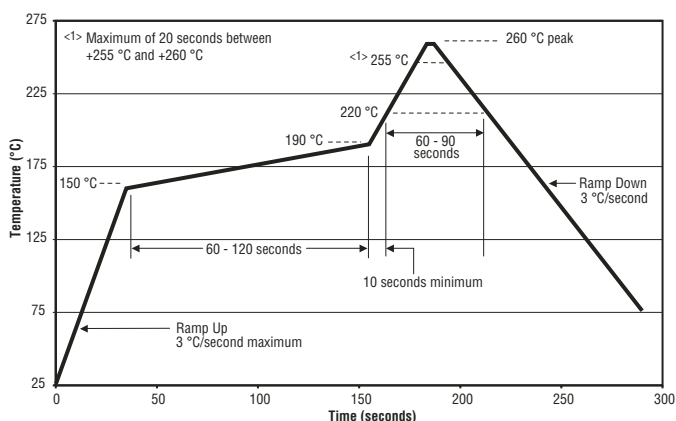
Resistors _____

- 2 = 2 Isolated Resistors
- 4 = 4 Isolated Resistors
- 8 = 8 Isolated Resistors

Terminations _____

- LF = Tin-plated (RoHS compliant)

Soldering Profile for RoHS Compliant Chip Resistors and Arrays



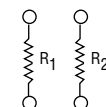
Packaging Size

J2.....0606 Package Size
 F4, J4....1206 Package Size
 F8.....2406 Package Size for CAT16
 J8.....2406 Package Size for CAT16;
 1506 Package Size for CAY16

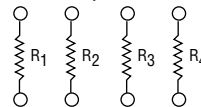
For Standard Values Used in Capacitors, Inductors, and Resistors, [click here](#).

Schematics

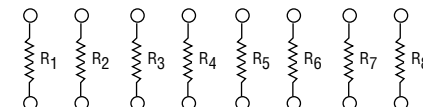
CAT16-J2
CAY16-J2



CAT16-F4, -J4
CAY16-F4, -J4



CAT16-F8, -J8
CAY16-J8



*RoHS Directive 2002/95/EC Jan 27 2003 including Annex

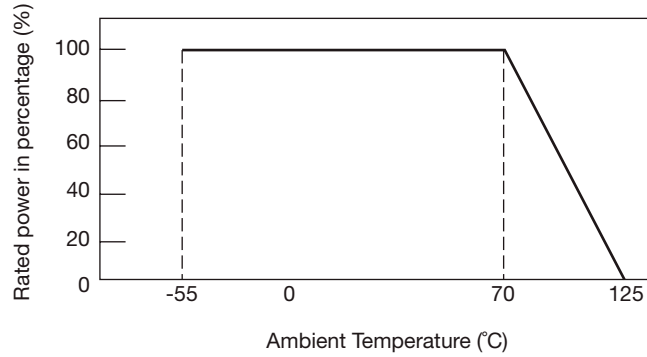
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CAT/CAY 16 Series - Chip Resistor Arrays

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Derating Curve

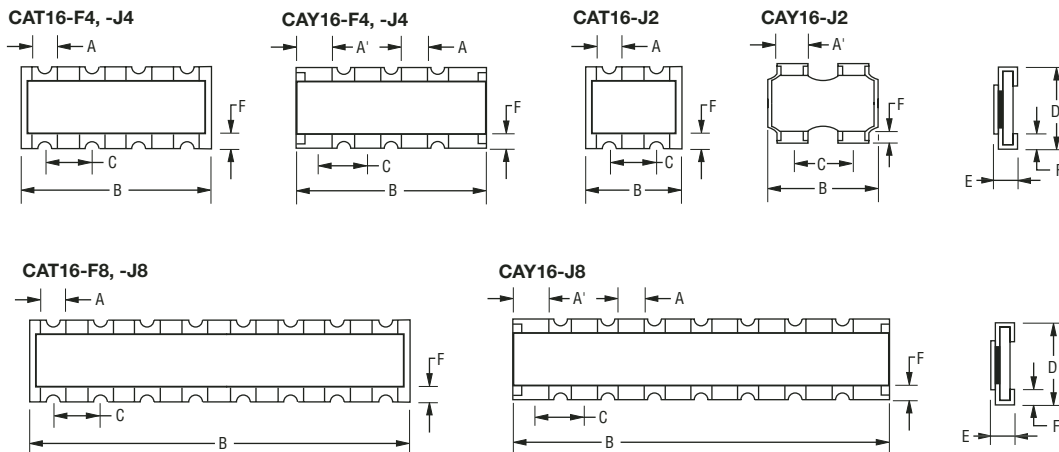


Dimensions

| Model | A | A' | B | C | D | E | F |
|---------------|---|---|---|---|---|---|---|
| CAT16-F4, -J4 | $\frac{0.40 \pm 0.15}{(.016 \pm .006)}$ | — | $\frac{3.20 \pm 0.20}{(.126 \pm .008)}$ | $\frac{0.80 \pm 0.05}{(.032 \pm .002)}$ | $\frac{1.60 \pm 0.20}{(.063 \pm .008)}$ | $\frac{0.50 \pm 0.10}{(.020 \pm .004)}$ | $\frac{0.30 \pm 0.15}{(.012 \pm .006)}$ |
| CAY16-F4, -J4 | $\frac{0.50 \pm 0.15}{(.002 \pm .006)}$ | $\frac{0.70 \pm 0.10}{(.027 \pm .008)}$ | $\frac{3.20 \pm 0.20}{(.126 \pm .008)}$ | $\frac{0.80 \pm 0.05}{(.032 \pm .002)}$ | $\frac{1.60 \pm 0.20}{(.063 \pm .008)}$ | $\frac{0.50 \pm 0.10}{(.020 \pm .004)}$ | $\frac{0.30 \pm 0.20}{(.012 \pm .008)}$ |
| CAT16-J2 | $\frac{0.40 \pm 0.15}{(.016 \pm .006)}$ | — | $\frac{1.60 \pm 0.15}{(.063 \pm .006)}$ | $\frac{0.80 \pm 0.05}{(.032 \pm .002)}$ | $\frac{1.60 \pm 0.15}{(.063 \pm .006)}$ | $\frac{0.60 \pm 0.15}{(.024 \pm .006)}$ | $\frac{0.30 \pm 0.20}{(.012 \pm .008)}$ |
| CAY16-J2 | — | $\frac{0.60 \pm 0.15}{(.024 \pm .006)}$ | $\frac{1.60 \pm 0.15}{(.063 \pm .006)}$ | $\frac{0.76 \pm 0.10}{(.030 \pm .004)}$ | $\frac{1.60 \pm 0.15}{(.063 \pm .006)}$ | $\frac{0.45 \pm 0.10}{(.018 \pm .004)}$ | $\frac{0.30 \pm 0.20}{(.012 \pm .008)}$ |
| CAT16-F8, -J8 | $\frac{0.40 \pm 0.15}{(.016 \pm .006)}$ | — | $\frac{6.40 \pm 0.20}{(.252 \pm .008)}$ | $\frac{0.80 \pm 0.15}{(.032 \pm .006)}$ | $\frac{1.60 \pm 0.20}{(.063 \pm .008)}$ | $\frac{0.60 \pm 0.15}{(.024 \pm .006)}$ | $\frac{0.30 \pm 0.20}{(.012 \pm .008)}$ |
| CAY16-J8 | $\frac{0.30 \pm 0.15}{(.012 \pm .006)}$ | $\frac{0.30 \pm 0.15}{(.012 \pm .006)}$ | $\frac{3.80 \pm 0.20}{(.15 \pm .008)}$ | $\frac{0.50 \pm 0.05}{(.02 \pm .002)}$ | $\frac{1.60 \pm 0.20}{(.063 \pm .008)}$ | $\frac{0.50 \pm 0.10}{(.02 \pm .004)}$ | $\frac{0.30 \pm 0.15}{(.012 \pm .006)}$ |

DIMENSIONS ARE: $\frac{\text{MM}}{\text{(INCHES)}}$

Configurations

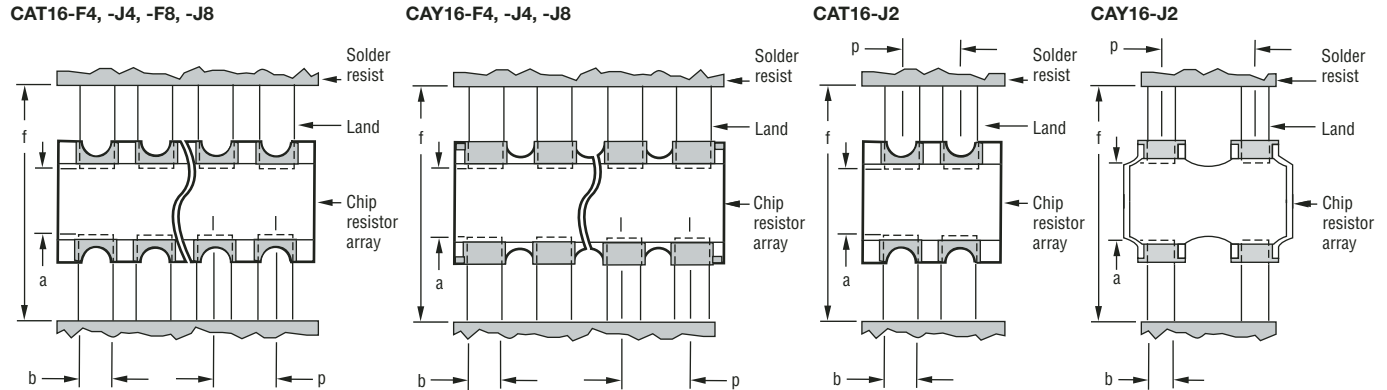


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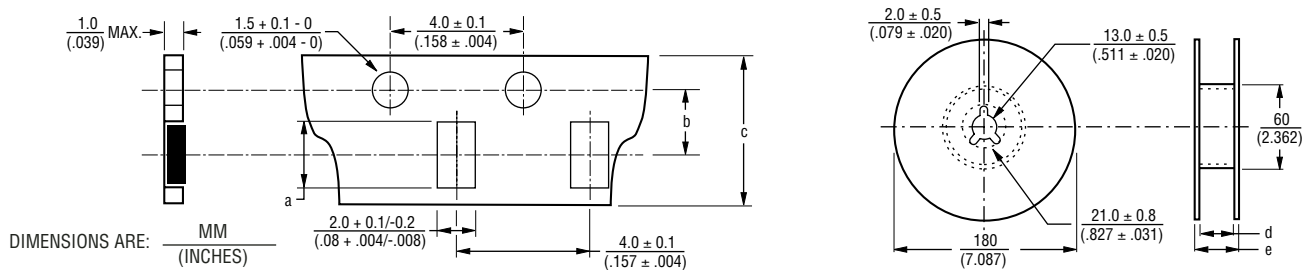
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Land Patterns



| Model | a | b | p | f |
|-------------------------|---|---|-----------------------|---|
| CAT16-F4, -J4, -F8, -J8 | $\frac{0.7 \text{ to } 0.9}{(.028 \text{ to } .035)}$ | $\frac{0.4 \text{ to } 0.45}{(.016 \text{ to } .0178)}$ | $\frac{0.80}{(.032)}$ | $\frac{2.0 \text{ to } 2.2}{(.079 \text{ to } .087)}$ |
| CAY16-F4, -J4 | $\frac{0.7 \text{ to } 0.9}{(.028 \text{ to } .035)}$ | $\frac{0.4 \text{ to } 0.45}{(.016 \text{ to } .0178)}$ | $\frac{0.80}{(.032)}$ | $\frac{2.4 \text{ to } 2.8}{(.094 \text{ to } .11)}$ |
| CAY16-J8 | $\frac{0.7 \text{ to } 0.9}{(.028 \text{ to } .035)}$ | $\frac{0.3 \text{ to } 0.35}{(.012 \text{ to } .014)}$ | $\frac{0.50}{(.020)}$ | $\frac{2.0 \text{ to } 2.2}{(.079 \text{ to } .087)}$ |
| CAT16-J2 | $\frac{0.7 \text{ to } 0.9}{(.028 \text{ to } .035)}$ | $\frac{0.4 \text{ to } 0.45}{(.016 \text{ to } .0178)}$ | $\frac{0.80}{(.032)}$ | $\frac{2.2 \text{ to } 2.6}{(.087 \text{ to } .102)}$ |
| CAY16-J2 | $\frac{0.7 \text{ to } 0.9}{(.028 \text{ to } .035)}$ | $\frac{0.4 \text{ to } 0.5}{(.016 \text{ to } .020)}$ | $\frac{0.80}{(.032)}$ | $\frac{2.0 \text{ to } 2.6}{(.079 \text{ to } .102)}$ |

Packaging Dimensions



| Model | a | b | c | d | e |
|------------------------------|---|---|--|--|--|
| CAT16-F4, -J4 & CAY16-F4, J4 | $\frac{3.40 \pm 0.10}{(.134 \pm .004)}$ | $\frac{3.50 \pm .005}{(.138 \pm .004)}$ | $\frac{8.0 \pm 0.3}{(.315 \pm .012)}$ | $\frac{9.0 \pm 0.3}{(.354 \pm .012)}$ | $\frac{11.4 \pm 1.0}{(.449 \pm .040)}$ |
| CAT16-J2 & CAY16-J2 | $\frac{1.80 \pm 0.10}{(.070 \pm .004)}$ | $\frac{3.50 \pm .005}{(.138 \pm .004)}$ | $\frac{8.0 \pm 0.3}{(.315 \pm .012)}$ | $\frac{9.0 \pm 0.3}{(.354 \pm .012)}$ | $\frac{11.4 \pm 1.0}{(.449 \pm .040)}$ |
| CAT16-F8, -J8 | $\frac{6.90 \pm 0.20}{(.272 \pm .008)}$ | $\frac{5.50 \pm 0.10}{(.217 \pm .004)}$ | $\frac{12.0 \pm 0.2}{(.472 \pm .008)}$ | $\frac{13.0 \pm 0.2}{(.512 \pm .008)}$ | $\frac{15.4 \pm 1.0}{(.606 \pm .040)}$ |
| CAY16-J8 | $\frac{4.10 \pm 0.15}{(.161 \pm .012)}$ | $\frac{3.50 \pm 0.05}{(.138 \pm .002)}$ | $\frac{8.0 \pm 0.3}{(.315 \pm .012)}$ | $\frac{9.0 \pm 0.3}{(.354 \pm .012)}$ | $\frac{11.4 \pm 1.0}{(.449 \pm .040)}$ |

- 5,000 pcs. per reel (J2, J4, CAY16-J8)
- 4,000 pcs. per reel (CAT16-F8, -J8)
- Paper tape

REV. 06/07

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