Features

- Lead free version available (see How to Order "Termination" options)
- RoHS compliant*
- Convex and concave terminals
- 2, 4 or 8 isolated elements available
- Resistance tolerance ±1 % and ±5 %
- Resistance range: 10 ohms to 1 megohm

BOURNS®

CAT/CAY 16 Series - Chip Resistor Arrays

Specifications

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

Characteristics

Characteristics	CAT16/CAY16
Number of Elements	2 (J2), 4 (F4, J4), 8 (J8)
Power Rating Per Resistor	62 mW (31 mW for CAY16-J8)
Resistance Tolerance	±1 %, ±5 %
Resistance Range E24 (J), E96 + E24 (F)	10 ohms - 1 megohm
Max. Working Voltage	50 V (25 V for CAY16-J8)
Operating Temp. Range	-55 °C - 125 °C
Rating Temperature	+70 °C

How To Order

CA Y 16 - 103 J 4 __

Chip Arrays

Type
- T = Concave
- Y = Convex

Models
- J2 = 0606 Package Size
- F4, J4 = 1206 Package Size
- J8 = 2406 Package Size for CAT16; 1506 Package Size for CAY16

Resistance Code
- 103 = 10 K ohms
- 1003 = 100 K ohms (1 % tolerance)

Resistance Tolerance
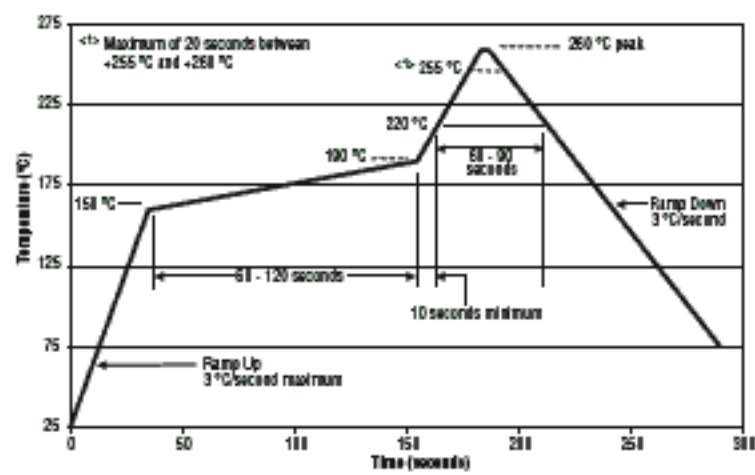- J = ±5 %
- F = ±1 % (4 resistor package only)

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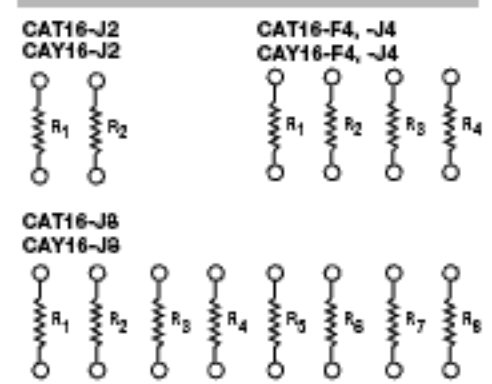- 4 = 4 Isolated Resistors
- 8 = 8 Isolated Resistors

Terminations*
- LF = Tin-plated (lead free)
- Blank = Solder-plated

*Model CAY16-J8 is available only with tin-plated terminations.

Soldering Profile for Lead Free Chip Resistors and Arrays

Schematics

CAT16-J2
CAY16-J2

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

CAT16-J8
CAY16-J8

Dimensions

Model	A	A'	B	C	D	E	F
CAT16-F4, -J4	0.40±0.15 (.016±.006)	—	3.20±0.20 (.126±.008)	0.80±0.05 (.032±.002)	1.60±0.20 (.063±.008)	0.50±0.10 (.020±.004)	0.30±0.15 (.012±.006)
CAY16-F4, -J4	0.50±0.15 (.002±.006)	0.70±0.10 (.027±.008)	3.20±0.20 (.126±.008)	0.80±0.05 (.032±.002)	1.60±0.20 (.063±.008)	0.50±0.10 (.020±.004)	0.30±0.20 (.012±.008)
CAT16-J2	0.40±0.15 (.016±.006)	—	1.60±0.15 (.063±.006)	0.80±0.05 (.032±.002)	1.60±0.15 (.063±.006)	0.60±0.15 (.024±.006)	0.30±0.20 (.012±.008)
CAY16-J2	—	0.60±0.15 (.024±.006)	1.60±0.15 (.063±.006)	0.80±0.05 (.032±.002)	1.60±0.15 (.063±.006)	0.50±0.10 (.020±.004)	0.25±0.10 (.010±.004)
CAT16-J8	0.40±0.15 (.016±.006)	—	6.40±0.20 (.252±.008)	0.80±0.15 (.032±.006)	1.60±0.20 (.063±.008)	0.60±0.15 (.024±.006)	0.30±0.20 (.012±.008)
CAY16-J8	0.30±0.15 (.012±.006)	0.30±0.15 (.012±.006)	3.80±0.20 (.15±.008)	0.50±0.05 (.02±.002)	1.60±0.20 (.063±.008)	0.50±0.10 (.02±.004)	0.30±0.15 (.012±.006)

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

Configurations
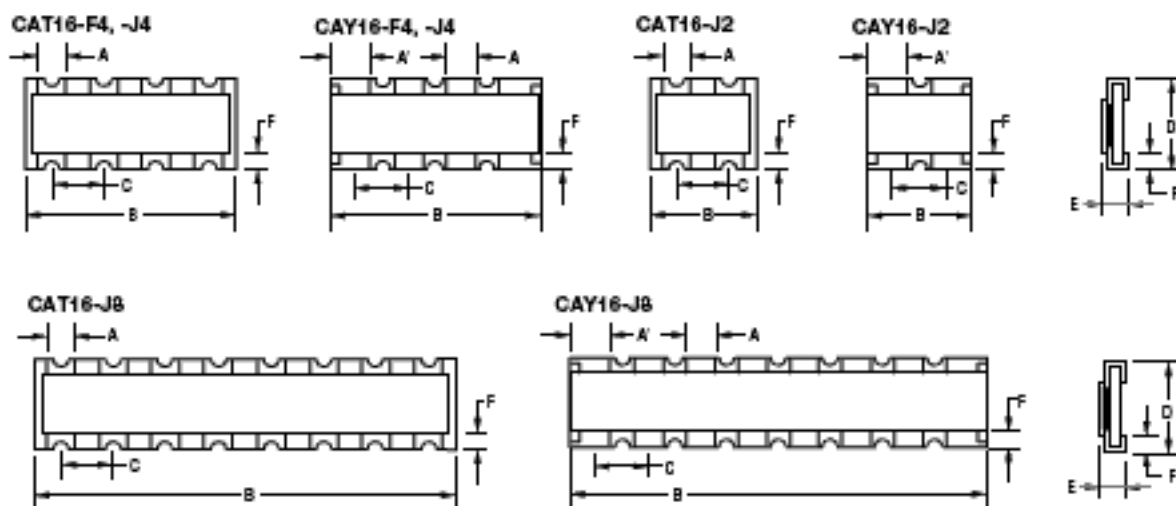
CAT16-F4, -J4   CAY16-F4, -J4   CAT16-J2   CAY16-J2

CAT16-J8   CAY16-J8

Land Patterns
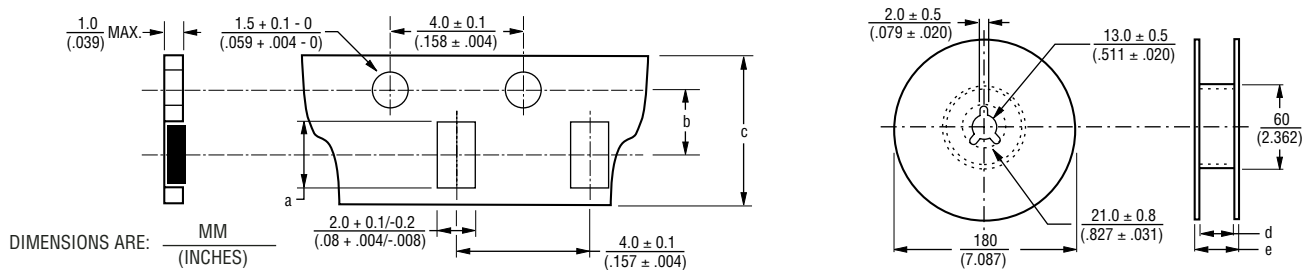
CAT16-F4, -J4, -J8
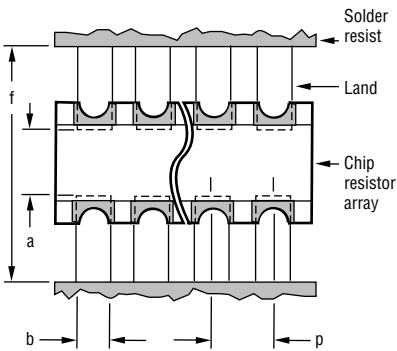
CAY16-F4, -J4, -J8
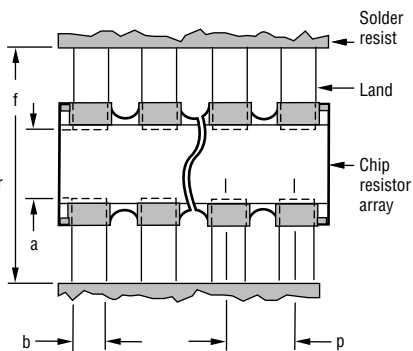
CAT16-J2
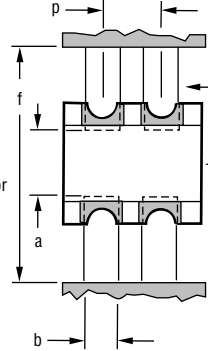
CAY16-J2
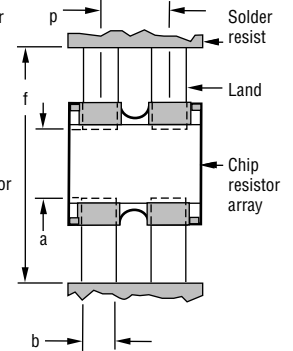
Model	a	b	p	f
CAT16-F4, -J4, -J8	0.7 to 0.9 (.028 to .035)	0.4 to 0.45 (.016 to .0178)	0.80 (.032)	2.0 to 2.2 (.079 to .087)
CAY16-F4, -J4	0.7 to 0.9 (.028 to .035)	0.4 to 0.45 (.016 to .0178)	0.80 (.032)	2.4 to 2.8 (.094 to .11)
CAY16-J8	0.7 to 0.9 (.028 to .035)	0.3 to 0.35 (.012 to .014)	0.50 (.020)	2.0 to 2.2 (.079 to .087)
CAT16-J2	0.7 to 0.9 (.028 to .035)	0.4 to 0.45 (.016 to .0178)	0.80 (.032)	2.2 to 2.6 (.087 to .102)
CAY16-J2	0.7 to 0.9 (.028 to .035)	0.4 to 0.45 (.016 to .0178)	0.80 (.032)	2.0 to 2.2 (.079 to .087)

Packaging Dimensions

DIMENSIONS ARE: MM / (INCHES)

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

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