

Features

- 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

CAT/CAY 16 Series - Chip Resistor Arrays

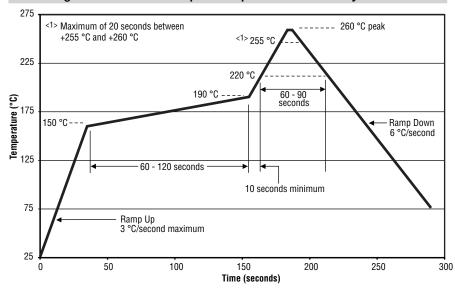
Specifications

Requirement	Characteristics	Test Method		
Short Time Overload	±2 % +0.1 ohm	Rated Voltage X 2.5, 5 seconds		
Soldering Heat	±2 % +0.1 ohm	260 °C ±5 °C, 10 seconds ±1 second		
Temperature Cycling (5) ±1 % + 0.1 ohm		125 °C (30 minutes) - normal (15 minutes) -55 °C (30 minutes) - normal (15 minutes)		
Moisture Load Life	±3 % +0.1 ohm	1000 hours		
Load Life	±3 % +0.1 ohm	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)		
Temperature Coefficient of Resistance	±200 PPM/°C		
Resistance Tolerance	±1 %, ±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		

Soldering Profile for RoHS Compliant Chip Resistors and Arrays



How To Order

CA Y 16 - 103 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 = ±5 % (Use "J" for zero-ohm jumper) • $F = \pm 1$ % (4 resistor pkg. and CAT16-F8) Resistors · 2 = 2 Isolated Resistors 4 = 4 Isolated Resistors • 8 = 8 Isolated Resistors

Terminations

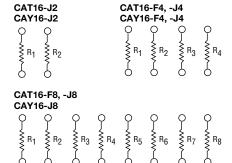
LF = Tin-plated (RoHS compliant)

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

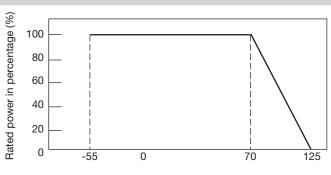


^{*}RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice.

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BOURNS

Derating Curve

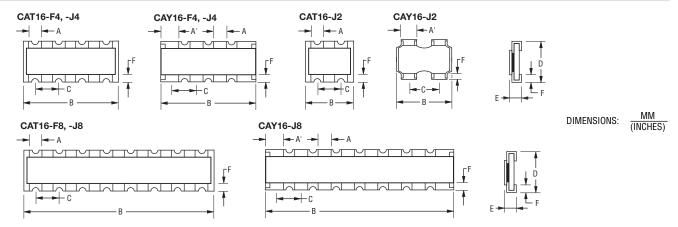


Ambient Temperature (°C)

Dimensions

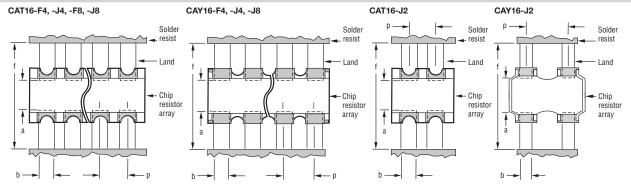
Model	А	A'	В	С	D	Е	F
CAT16-F4	$\frac{0.40 \pm 0.15}{(.016 \pm .006)}$	_	$\frac{3.20 \pm 0.20}{(.126 \pm .008)}$	$\frac{0.80 \pm 0.10}{(.032 \pm .004)}$	$\frac{1.60 \pm 0.20}{(.063 \pm .008)}$	$\frac{0.50 \pm 0.10}{(.020 \pm .004)}$	$\frac{0.30 \pm 0.15}{(.012 \pm .006)}$
CAT16-J4	$\frac{0.40 \pm 0.15}{(.016 \pm .006)}$	_	$\frac{3.20 \pm 0.20}{(.126 \pm .008)}$	$\begin{array}{c} 0.80 \pm 0.10 \\ (.032 \ \pm \pm \ .004) \end{array}$	$\frac{1.55 \pm 0.25}{(.061 \pm .0098)}$	$\frac{0.50 \pm 0.10}{(.020 \pm .004)}$	$\frac{0.30 \pm 0.20}{(.012 \pm .008)}$
CAY16-F4, -J4	$\frac{0.50 \pm 0.15}{(.002 \pm .006)}$	$\frac{0.70 \pm 0.10}{(.027 \pm .004)}$	$\frac{3.20 \pm 0.20}{(.126 \pm .008)}$	$\frac{0.80 \pm 0.05}{(.032 \pm .002)}$	$\frac{1.60 \pm 0.20}{(.063 \pm .008)}$	$\frac{0.50 \pm 0.10}{(.020 \pm .004)}$	$\frac{0.30 \pm 0.20}{(.012 \pm .008)}$
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	_	$\frac{0.60 \pm 0.15}{(.024 \pm .006)}$	$\frac{1.60 \pm 0.15}{(.063 \pm .006)}$	$\frac{0.76 \pm 0.10}{(.030 \pm .004)}$	$\frac{1.60 \pm 0.15}{(.063 \pm .006)}$	0.45 +0.15/-0.10 (.018 +0.006/-0.004)	$\frac{0.30 \pm 0.20}{(.012 \pm .008)}$
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	$\frac{0.30 \pm 0.15}{(.012 \pm .006)}$	$\frac{0.30 \pm 0.15}{(.012 \pm .006)}$	$\frac{3.80 \pm 0.20}{(.15 \pm .008)}$	$\frac{0.50 \pm 0.05}{(.02 \pm .002)}$	$\frac{1.60 \pm 0.20}{(.063 \pm .008)}$	$\frac{0.50 \pm 0.10}{(.02 \pm .004)}$	$\frac{0.30 \pm 0.15}{(.012 \pm .006)}$

Configurations



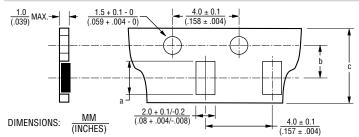
CAT/CAY 16 Series - Chip Resistor Arrays

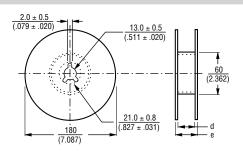
Land Patterns



Model	а	b	р	f
CAT16-F4, -J4, -F8, -J8	0.7 to 0.9	<u>0.4 to 0.45</u>	<u>0.80</u>	2.2 to 2.6
	(.028 to .035)	(.016 to .0178)	(.032)	(.087 to .102)
CAY16-F4, -J4	0.7 to 0.9 (.028 to .035)		<u>0.80</u> (.032)	2.4 to 2.8 (.094 to .11)
CAY16-J8	0.7 to 0.9	0.3 to 0.35	<u>0.50</u>	2.0 to 2.2
	(.028 to .035)	(.012 to .014)	(.020)	(.079 to .087)
CAT16-J2	0.7 to 0.9	_ <u>0.4 to 0.45</u>	<u>0.80</u>	2.2 to 2.6
	(.028 to .035)	(.016 to .0178)	(.032)	(.087 to .102)
CAY16-J2	0.7 to 0.9	0.4 to 0.5	<u>0.80</u>	2.0 to 2.6
	(.028 to .035)	(.016 to .020)	(.032)	(.079 to .102)

Packaging Dimensions





Model	а	b	С	d	е
CAT16-F4, -J4 & CAY16-F4, J4	$\frac{3.60 \pm 0.20}{(.142 \pm .008)}$	$3.50 \pm .005$ (.138 ± .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	$\frac{1.80 \pm 0.10}{(.070 \pm .004)}$	3.50 ± .005 (.138 ± .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	$\frac{6.90 \pm 0.20}{(.272 \pm .008)}$	5.50 ± 0.10 (.217 ± .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	4.10 ± 0.15 (.161 ± .012)	3.50 ± 0.05 (.138 ± .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)

REV. 09/14

^{4,000} pcs. per reel (CAT16-F8, -J8)