

OxiCap® NLJ Series



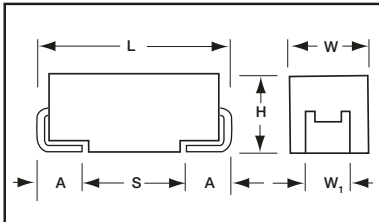
Niobium Oxide Capacitors High CV Consumer Series



- High Volumetric efficiency
- Environmentally friendly
- 3xreflow 260°C compatible
- Consumer applications
- OxiCap® non-burn technology
- RoHS compliance
- Lead-free solution
- 6 case sizes available
- CV range: 22-150µF / 4-10V



Elektra Award
2005



For part marking see page 151

CASE DIMENSIONS: millimeters (inches)

| Code | EIA Code | EIA Metric | L±0.20 (0.008) | W+0.20 (0.008) -0.10 (0.004) | H+0.20 (0.008) -0.10 (0.004) | W ₁ ±0.20 (0.008) | A+0.30 (0.012) -0.20 (0.008) | S Min. |
|------|----------|------------|----------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------|
| A | 1206 | 3216-18 | 3.20 (0.126) | 1.60 (0.063) | 1.60 (0.063) | 1.20 (0.047) | 0.80 (0.031) | 1.10 (0.043) |
| B | 1210 | 3528-21 | 3.50 (0.138) | 2.80 (0.110) | 1.90 (0.075) | 2.20 (0.087) | 0.80 (0.031) | 1.40 (0.055) |
| C | 2312 | 6032-28 | 6.00 (0.236) | 3.20 (0.126) | 2.60 (0.102) | 2.20 (0.087) | 1.30 (0.051) | 2.90 (0.114) |
| D | 2917 | 7343-31 | 7.30 (0.287) | 4.30 (0.169) | 2.90 (0.114) | 2.40 (0.094) | 1.30 (0.051) | 4.40 (0.173) |
| G | 1206 | 3216-15 | 3.20 (0.126) | 1.60 (0.063) | 1.50 (0.059) max | 1.20 (0.047) | 0.80 (0.031) | 1.10 (0.043) |
| P | 0805 | 2012-15 | 2.05 (0.081) | 1.35 (0.053) | 1.50 (0.059) max | 1.00±0.10 (0.039±0.004) | 0.50 (0.020) | 0.85 (0.033) |
| S | 1206 | 3216-12 | 3.20 (0.126) | 1.60 (0.063) | 1.20 (0.047) max | 1.20 (0.047) | 0.80 (0.031) | 1.10 (0.043) |
| T | 1210 | 3528-12 | 3.50 (0.138) | 2.80 (0.110) | 1.20 (0.047) max | 2.20 (0.087) | 0.80 (0.031) | 1.40 (0.055) |
| W | 2312 | 6032-15 | 6.00 (0.236) | 3.20 (0.126) | 1.50 (0.059) max | 2.20 (0.087) | 1.30 (0.051) | 2.90 (0.114) |
| Y | 2917 | 7343-20 | 7.30 (0.287) | 4.30 (0.169) | 2.00 (0.079) max | 2.40 (0.094) | 1.30 (0.051) | 4.40 (0.173) |

W₁ dimension applies to the termination width for A dimensional area only.

HOW TO ORDER

| | | | | | | |
|-------------|-------------------------------------|--|----------------------------|--|---|------------------|
| NLJ | A | 476 | M | 006 | R | 1600 |
| Type | Case Size See table above | Capacitance Code 1st two digits represent significant figures, 3rd digit represents multiplier in pF | Tolerance M=±20% | Rated DC Voltage 004 = 4Vdc 006 = 6.3Vdc 010 = 10Vdc | Packaging R = Pure Tin 7" Reel S = Pure Tin 13" Reel | ESR in mΩ |

Under development

TECHNICAL SPECIFICATIONS

| | | | | | |
|------------------------------------|---|------|------|-----|--|
| Technical Data: | All technical data relate to an ambient temperature of +25°C | | | | |
| Capacitance Range: | 6.8 µF to 1000 µF | | | | |
| Capacitance Tolerance: | ±20% | | | | |
| Leakage Current DCL: | 0.1CV | | | | |
| Rated Voltage DC (V _R) | -55°C ≤ +40°C: | 4 | 6.3 | 10 | |
| Category Voltage (V _C) | at 85°C: | 2 | 3.15 | 5 | |
| Category Voltage (V _C) | at 105°C: | 1.32 | 2 | 3.3 | |
| Temperature Range: | -55°C to +105°C with category voltage | | | | |
| Reliability: | 0.2% per 1000 hours at 85°C, 0.5xV _R , 0.1Ω/V series impedance with 60% confidence level | | | | |

OxiCap® NLJ Series



Niobium Oxide Capacitors High CV Consumer Series

CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

| Capacitance | | Rated Voltage DC to 40°C / 0.5DC to 85°C / 0.33DC to 105°C | | |
|-------------|------|--|------------------|-----------------------------|
| µF | Code | 4V (G) | 6.3V (J) | 10V (A) |
| 6.8 | 685 | | | K(4000)*/P(5000)* |
| 10 | 106 | | K(4000)* | K(2200)*/P(6000)* |
| 15 | 156 | K(4000)*/P(4000)* | P(3500)* | L(2800)*/S(2000)* |
| 22 | 226 | P(4000) | L(2500)*/S(1800) | A(4000)/G(3000) L(2200)* |
| 33 | 336 | A(3000)*/S(1700)* | G(2200)/L(2500)* | A(1700)/T(1800)* |
| 47 | 476 | A(2600)*/G(2600)* L(1600)* | A(1600)/T(1600) | B(1000)/H(1000)* W(400)* |
| 68 | 686 | A(1500)*/T(1500)* | H(900)* | B(1400)* |
| 100 | 107 | H(900)* | B(1700)/W(600)* | C(1200)*/Y(1200)* |
| 150 | 157 | B(1500)/W(400)* | | |
| 220 | 227 | | | D(1000)* |
| 330 | 337 | | C(500)*/Y(500)* | |
| 470 | 477 | C(500)*/Y(500)* | | |
| 680 | 687 | | D(500)* | |
| 1000 | 108 | D(500)* | | |



LEAD-FREE

LEAD-FREE COMPATIBLE
COMPONENT



RoHS
COMPLIANT



NON-BURN
NON-SMOKE

Available Ratings, (ESR ratings in mOhms in brackets)

Engineering samples - please contact manufacturer

*Codes under development - subject to change

Note: Voltage ratings are minimum values. AVX reserves the right to supply higher ratings in the same case size, to the same reliability standards.

RATINGS & PART NUMBER REFERENCE

| AVX Part No. | Case Size | Capacitance (µF) | Rated Voltage (V) | Maximum Surge Current (A)* | DCL (µA) Max. | ESR Max. (mΩ) @100kHz | MSL | 100kHz Ripple Current (mA) | | | 100kHz Ripple Voltage (mV) | | |
|--|-----------|------------------|-------------------|----------------------------|---------------|-----------------------|-----|----------------------------|------|-------|----------------------------|------|-------|
| | | | | | | | | 25°C | 85°C | 105°C | 25°C | 85°C | 105°C |
| 4 Volt @ 85°C (1.32 Volt @ 105°C) | | | | | | | | | | | | | |
| NLJP226M004#4000 | P | 22 | 4 | 0.4 | 8.8 | 4000 | 3 | 134 | 121 | 54 | 537 | 483 | 215 |
| NLJB157M004#1500 | B | 150 | 4 | 1.0 | 60.0 | 1500 | 3 | 261 | 235 | 104 | 391 | 352 | 156 |
| NLJW157M004#0400 | W | 150 | 4 | 2.4 | 60.0 | 400 | 3 | 520 | 468 | 208 | 208 | 187 | 83 |
| NLJC477M004#0500 | C | 470 | 4 | 2.1 | 188.0 | 500 | 3 | 514 | 462 | 206 | 257 | 231 | 103 |
| NLJY477M004#0500 | Y | 470 | 4 | 2.1 | 188.0 | 500 | 3 | 548 | 493 | 219 | 274 | 246 | 110 |
| NLJD108M004#0500 | D | 1000 | 4 | 2.1 | 400.0 | 500 | 3 | 600 | 540 | 240 | 300 | 270 | 120 |
| 6.3 Volt @ 85°C (2 Volt @ 105°C) | | | | | | | | | | | | | |
| NLJS226M006#1800 | S | 22 | 6.3 | 1.4 | 13.2 | 1800 | 3 | 208 | 187 | 83 | 375 | 337 | 150 |
| NLJG336M006#2200 | G | 33 | 6.3 | 1.2 | 19.8 | 2200 | 3 | 195 | 176 | 78 | 430 | 387 | 172 |
| NLJA476M006#1600 | A | 47 | 6.3 | 1.5 | 28.2 | 1600 | 3 | 237 | 213 | 98 | 379 | 342 | 152 |
| NLJT476M006#1600 | T | 47 | 6.3 | 1.5 | 28.2 | 1600 | 3 | 245 | 220 | 98 | 392 | 353 | 157 |
| NLJB107M006#1700 | B | 100 | 6.3 | 1.5 | 60.0 | 1700 | 3 | 245 | 220 | 98 | 416 | 375 | 167 |
| NLJW107M006#0600 | W | 100 | 6.3 | 3.0 | 60.0 | 600 | 3 | 424 | 382 | 170 | 255 | 229 | 102 |
| NLJC337M006#0500 | C | 330 | 6.3 | 3.3 | 198.0 | 500 | 3 | 514 | 462 | 206 | 257 | 231 | 103 |
| NLJY337M006#0500 | Y | 330 | 6.3 | 3.3 | 198.0 | 500 | 3 | 548 | 493 | 219 | 274 | 246 | 110 |
| NLJD687M006#0500 | D | 680 | 6.3 | 3.3 | 408.0 | 500 | 3 | 600 | 540 | 240 | 300 | 270 | 120 |
| 10 Volt @ 85°C (3.3 Volt @ 105°C) | | | | | | | | | | | | | |
| NLJA226M010#4000 | A | 22 | 10 | 1.1 | 22.0 | 4000 | 3 | 150 | 135 | 60 | 600 | 540 | 240 |
| NLJG226M010#3000 | G | 22 | 10 | 1.4 | 22.0 | 3000 | 3 | 167 | 151 | 67 | 502 | 452 | 201 |
| NLJA336M010#1700 | A | 33 | 10 | 2.3 | 33.0 | 1700 | 3 | 230 | 207 | 92 | 391 | 352 | 156 |
| NLJB476M010#1000 | B | 47 | 10 | 3.4 | 47.0 | 1000 | 3 | 319 | 287 | 128 | 319 | 287 | 128 |
| NLJW476M010#0400 | W | 47 | 10 | 5.9 | 47.0 | 400 | 3 | 520 | 468 | 208 | 208 | 187 | 83 |
| NLJC107M010#1200 | C | 100 | 10 | 3.0 | 100.0 | 1200 | 3 | 332 | 298 | 133 | 398 | 358 | 159 |
| NLJY107M010#1200 | Y | 100 | 10 | 3.0 | 100.0 | 1200 | 3 | 354 | 318 | 141 | 424 | 382 | 170 |
| NLJD227M010#1000 | D | 220 | 10 | 3.4 | 220.0 | 1000 | 3 | 424 | 382 | 170 | 424 | 382 | 170 |

Moisture Sensitivity Level (MSL) is defined according to J-STD-020.

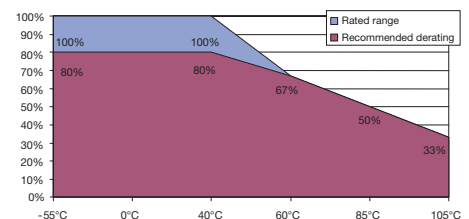
All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

ESR allowed to move up to 1.25 times catalogue limit post mounting
DCL allowed to move up to 2.00 times catalogue limit post mounting

For typical weight and composition see page 144.

NOTE: AVX reserves the right to supply a higher voltage rating or tighter tolerance part in the same case size, to the same reliability standards.

Voltage vs Temperature Rating





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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