

OxiCap® NLJ Series



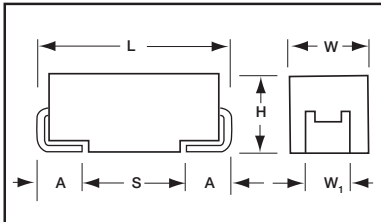
Niobium Oxide Capacitors High CV Consumer Series



- High Volumetric efficiency
- Environmentally friendly
- 3xreflow 260°C compatible
- Consumer applications
- OxiCap® non-burn technology
- RoHS compliance
- Lead-free solution
- 10 case sizes available
- CV range: 22-1000µF / 4-10V



Electra Award
2005



For part marking see page 134

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	1.0±0.1 (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

Type

A

Case Size
See table above

476

Capacitance Code
1st two digits represent significant figures, 3rd digit represents multiplier in pF

M

Tolerance
M=±20%

006

Rated DC Voltage
004 = 4Vdc
006 = 6.3Vdc
010 = 10Vdc

R

Packaging
R = Lead Free 7" Reel
S = Lead Free 13" Reel

1600

ESR in mΩ

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(3000)*/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)													
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 127.

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

