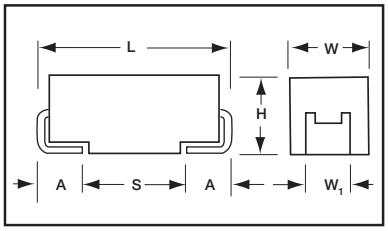
OxiCap® NOS Low ESR Series

Niobium Oxide Capacitor

- Low ESR Nb0 capacitors
- Non-burn safe technology
- Reliability level: 0.2%/1000 hrs.
- CV range: 10-1000µF / 1.8-6.3V
- 9 case sizes available
- IBM global approval received in 2004
- Electra Award received in 2005

Electra Award 2005



For part marking see page 132

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)
E	2917	7343-43	7.30 (0.287)	4.30 (0.169)	4.10 (0.162)	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
V	2924	7361-38	7.30 (0.287)	6.10 (0.240)	3.45 ±0.30 (0.136±0.012)	3.10 (0.120)	1.40 (0.055)	4.40 (0.173)
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)
X	2917	7343-15	7.30 (0.287)	4.30 (0.169)	1.50 (0.059)	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
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)
W_1 dimension applies to the termination width for A dimensional area only.								

HOW TO ORDER

NOS	D	107	M	006	R	0100	–
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** 001 = 1.8Vdc 002 = 2.5Vdc 004 = 4Vdc 006 = 6.3Vdc	**Packaging** R = Lead Free 7" Reel S = Lead Free 13" Reel	**ESR in mΩ**	**Additional characters may be added for special requirements** V = Dry pack Option (selected codes only) with exception of D, E, X, Y, V cases

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C is not stated					
Capacitance Range:	10 µF to 1000 µF					
Capacitance Tolerance:	±20%					
Leakage Current DCL:	0.02CV					
Rated Voltage DC (V_R)	≤ +85°C:	1.8	2.5	4	6.3	
Category Voltage (V_C)	≤ +125°C:	0.9	1.3	2	3	
Surge Voltage (V_S)	≤ +85°C:	2.3	3.3	5.2	8	
Surge Voltage (V_S)	≤ +125°C:	1.2	1.7	2.6	4	
Temperature Range:	-55°C to +125°C					
Reliability:	0.2% per 1000 hours at 85°C, V_R, 0.1Ω/V series impedance, 60% confidence level					
	Meets requirements of AEC-Q200					

OxiCap® NOS Low ESR Series

Niobium Oxide Capacitor

CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC (V_R) to 85°C / 0.66 DC to 105°C / 0.5 DC to 125°C			
µF	Code	1.8V (x)	2.5V (e)	4.0V (G)	6.3V (J)
4.7	475				
6.8	685				
10	106				A(800, 1000, 2000)
15	156			A(1500)	B(600)
22	226		A(900)	B(600)	B(600)
33	336			B(600)	B(600) C(500) W(250)
47	476		B(500)	B(500) C(300) W(150)	B(500) C(300)
68	686		C(200) W(150)	C(200)	C(75,200) X(100) Y(100)
100	107	B(350) W(150)	C(150)	C(70,150) X(100)	C(150) D(80,100) Y(100)
150	157		C(65,150) X(100)	C(90,150) Y(100)	D(50,70,100) Y(100)
220	227	C(125) X(100)	C(80,125) Y(100)	D(40,60,100) Y(100)	D(45,60,100) E(80,100)
330	337	Y(100)	D(35,50,100) Y(100)	D(35,55,100) E(100)/Y(150)	E(80,100)
470	477	Y(100)	D(35,55,100) E(100)	D(100) E(75,100)	V(75)
680	687		E(60)	V(75)	
1000	108		V(50)		

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.

LEAD-FREE

LEAD-FREE COMPATIBLE COMPONENT

RoHS COMPLIANT

NON-BURN NON-SMOKE

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage(V)	DCL (µA)	DF %	ESR Max. (mΩ) @100kHz	100kHz Ripple Current Ratings (A)			100kHz Ripple Voltage Ratings (V)		
							25ºC	85ºC	125ºC	25ºC	85ºC	125ºC
1.8 Volt @ 85°C (1.2 Volt @ 105°C, 0.9 Volt @ 125ºC)												
NOSB107M001#0350	B	100	1.8	3.6	6	350	0.540	0.486	0.216	0.189	0.170	0.076
NOSW107M001#0150	W	100	1.8	3.6	6	150	0.849	0.764	0.339	0.127	0.115	0.051
NOSC227M001#0125	C	220	1.8	8.0	8	125	1.028	0.925	0.411	0.128	0.116	0.051
NOSX227M001#0100	X	220	1.8	8.0	8	100	1.095	0.986	0.438	0.110	0.099	0.044
NOSY337M001#0100	Y	330	1.8	11.9	8	100	1.225	1.102	0.490	0.122	0.110	0.049
NOSY477M001#0100	Y	470	1.8	16.9	8	100	1.225	1.102	0.490	0.122	0.110	0.049
2.5 Volt @ 85°C (1.7 Volt @ 105°C, 1.3 Volt @ 125ºC)												
NOSA226M002#0900	A	22	2.5	1.1	6	900	0.316	0.285	0.126	0.285	0.256	0.114
NOSB476M002#0500	B	47	2.5	2.4	6	500	0.452	0.406	0.181	0.226	0.203	0.090
NOSC686M002#0200	C	68	2.5	3.4	6	200	0.812	0.731	0.325	0.162	0.146	0.065
NOSW686M002#0150	W	68	2.5	3.4	6	150	0.849	0.764	0.339	0.127	0.115	0.051
NOSC107M002#0150	C	100	2.5	5.0	6	150	0.938	0.844	0.375	0.141	0.127	0.056
NOSC157M002#0065	C	150	2.5	7.6	6	65	1.425	1.283	0.570	0.093	0.083	0.037
NOSC157M002#0150	C	150	2.5	7.6	6	150	0.938	0.844	0.375	0.141	0.127	0.056
NOSX157M002#0100	X	150	2.5	7.5	6	100	1.095	0.986	0.438	0.110	0.099	0.044
NOSC227M002#0080	C	220	2.5	11.0	8	80	1.285	1.156	0.514	0.103	0.092	0.041
NOSC227M002#0125	C	220	2.5	11.0	8	125	1.028	0.925	0.411	0.128	0.116	0.051
NOSY227M002#0100	Y	220	2.5	11.0	8	100	1.225	1.102	0.490	0.122	0.110	0.049
NOSD337M002#0035	D	330	2.5	16.5	6	35	2.268	2.041	0.907	0.079	0.071	0.032
NOSD337M002#0100	D	330	2.5	16.5	10	100	1.342	1.207	0.537	0.134	0.121	0.054
NOSY337M002#0100	Y	330	2.5	16.5	10	100	1.225	1.102	0.490	0.122	0.110	0.049
NOSD477M002#0035	D	470	2.5	23.5	6	35	2.268	2.041	0.907	0.079	0.071	0.032
NOSD447M002#0055	D	470	2.5	23.5	10	55	1.809	1.628	0.724	0.099	0.090	0.040
NOSD447M002#0100	D	470	2.5	23.5	10	100	1.342	1.207	0.537	0.134	0.121	0.054
NOSE477M002#0100	E	470	2.5	23.5	10	100	1.407	1.266	0.563	0.141	0.127	0.056
NOSE687M002#0060	E	680	2.5	34.0	12	60	1.817	1.635	0.727	0.109	0.098	0.044
NOSV108M002#0050	V	1000	2.5	50.0	18	50	2.449	2.205	0.980	0.122	0.110	0.049
4 Volt @ 85°C (2.6 Volt @ 105°C, 2 Volt @ 125ºC)												
NOSA156M004#1500	A	15	4	1.2	6	1500	0.245	0.220	0.098	0.367	0.331	0.147
NOSB226M004#0600	B	22	4	1.8	6	600	0.412	0.371	0.165	0.247	0.223	0.099
NOSB336M004#0600	B	33	4	2.6	6	600	0.412	0.371	0.165	0.247	0.223	0.099
NOSB476M004#0500	B	47	4	3.8	6	500	0.452	0.406	0.181	0.226	0.203	0.090
NOSC476M004#0300	C	47	4	3.8	6	300	0.663	0.597	0.265	0.199	0.179	0.080
NOSW476M004#0150	W	47	4	3.8	6	150	0.849	0.764	0.339	0.127	0.115	0.051
NOSC686M004#0200	C	68	4	5.4	6	200	0.812	0.731	0.325	0.162	0.146	0.065
NOSC107M004#0070	C	100	4	8.0	6	70	1.373	1.236	0.549	0.096	0.087	0.038
NOSC107M004#0150	C	100	4	8.0	6	150	0.938	0.844	0.375	0.141	0.127	0.056
NOSX107M004#0100	X	100	4	8.0	6	100	1.095	0.986	0.438	0.110	0.099	0.044
NOSC157M004#0090	C	150	4	12.0	6	90	1.211	1.090	0.484	0.109	0.098	0.044
NOSC157M004#0150	C	150	4	12.0	6	150	0.938	0.844	0.375	0.141	0.127	0.056
NOSY157M004#0100	Y	150	4	12.0	6	100	1.225	1.102	0.490	0.122	0.110	0.049
NOSD227M004#0040	D	220	4	17.6	6	40	2.121	1.909	0.849	0.085	0.076	0.034
NOSD227M004#0060	D	220	4	17.6	8	60	1.732	1.559	0.693	0.104	0.094	0.042
NOSD227M004#0100	D	220	4	17.6	8	100	1.342	1.207	0.537	0.134	0.121	0.054
NOSY227M004#0100	Y	220	4	17.6	10	100	1.225	1.102	0.490	0.122	0.110	0.049
NOSD337M004#0035	D	330	4	26.4	6	35	2.268	2.041	0.907	0.079	0.071	0.032
NOSD337M004#0100	D	330	4	26.4	8	100	1.342	1.207	0.537	0.134	0.121	0.054
NOSE337M004#0100	E	330	4	26.4	8	100	1.407	1.266	0.563	0.141	0.127	0.056
NOSY337M004#0150	Y	330	4	26.4	12	150	1.000	0.900	0.400	0.150	0.135	0.060
NOSD477M004#0100	D	470	4	37.6	12	100	1.342	1.207	0.537	0.134	0.121	0.054
NOSE477M004#0075	E	470	4	37.6	12	75	1.625	1.462	0.650	0.122	0.110	0.049
NOSE477M004#0100	E	470	4	37.6	12	100	1.407	1.266	0.563	0.141	0.127	0.056
NOSV687M004#0075	V	680	4	54.4	14	75	2.000	1.800	0.800	0.150	0.135	0.060

- Insert R for 7" reel or S for 13" reel

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

MSL level: See page 123 (6. Moisture Sensitivity Level) or packaging and reel label.

ESR allowed to move up to 1.25 times catalog limit post mounting.

Note: AVX reserves the rights to supply higher voltage rating in the same case size to the same reliability standards.

OxiCap® NOS Low ESR Series

Niobium Oxide Capacitor

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage(V)	DCL (µA)	DF %	ESR Max. (mΩ) @100kHz	100kHz Ripple Current Ratings (A)			100kHz Ripple Voltage Ratings (V)		
							25ºC	85ºC	125ºC	25ºC	85ºC	125ºC
6.3 Volt @ 85°C (4 Volt @ 105°C, 3 Volt @ 125ºC)												
NOSA106M006#0800	A	10	6.3	1.2	6	800	0.335	0.302	0.134	0.268	0.241	0.107
NOSA106M006#1000	A	10	6.3	1.2	6	1000	0.300	0.270	0.120	0.300	0.270	0.120
NOSA106M006#2000	A	10	6.3	1.2	6	2000	0.212	0.191	0.085	0.424	0.382	0.170
NOSB156M006#0600	B	15	6.3	1.8	6	600	0.412	0.371	0.165	0.247	0.223	0.099
NOSB226M006#0600	B	22	6.3	2.6	6	600	0.412	0.371	0.165	0.247	0.223	0.099
NOSB336M006#0600	B	33	6.3	4.0	6	600	0.412	0.371	0.165	0.247	0.223	0.099
NOSC336M006#0500	C	33	6.3	4.0	6	500	0.514	0.462	0.206	0.257	0.231	0.103
NOSW336M006#0250	W	33	6.3	4.0	6	250	0.657	0.592	0.263	0.164	0.148	0.066
NOSB476M006#0500	B	47	6.3	5.6	6	500	0.452	0.406	0.181	0.226	0.203	0.090
NOSC476M006#0300	C	47	6.3	5.7	6	300	0.663	0.597	0.265	0.199	0.179	0.080
NOSC686M006#0075	C	68	6.3	8.2	6	75	1.327	1.194	0.531	0.099	0.090	0.040
NOSC686M006#0200	C	68	6.3	8.2	6	200	0.812	0.731	0.325	0.162	0.146	0.065
NOSX686M006#0100	X	68	6.3	8.2	6	100	1.095	0.986	0.438	0.110	0.099	0.044
NOSY686M006#0100	Y	68	6.3	8.2	6	100	1.225	1.102	0.490	0.122	0.110	0.049
NOSC107M006#0150	C	100	6.3	12.0	8	150	0.938	0.844	0.375	0.141	0.127	0.056
NOSD107M006#0080	D	100	6.3	12.0	6	80	1.500	1.350	0.600	0.120	0.108	0.048
NOSD107M006#0100	D	100	6.3	12.0	6	100	1.342	1.207	0.537	0.134	0.121	0.054
NOSY107M006#0100	Y	100	6.3	12.0	6	100	1.225	1.102	0.490	0.122	0.110	0.049
NOSD157M006#0050	D	150	6.3	18.0	6	50	1.897	1.708	0.759	0.095	0.085	0.038
NOSD157M006#0070	D	150	6.3	18.0	6	70	1.604	1.443	0.641	0.112	0.101	0.045
NOSD157M006#0100	D	150	6.3	18.0	6	100	1.342	1.207	0.537	0.134	0.121	0.054
NOSY157M006#0100	Y	150	6.3	18.0	6	100	1.225	1.102	0.490	0.122	0.110	0.049
NOSD227M006#0045	D	220	6.3	26.4	6	45	2.000	1.800	0.800	0.090	0.081	0.036
NOSD227M006#0060	D	220	6.3	26.4	8	60	1.732	1.559	0.693	0.104	0.094	0.042
NOSD227M006#0100	D	220	6.3	26.4	8	100	1.342	1.207	0.537	0.134	0.121	0.054
NOSE227M006#0080	E	220	6.3	26.4	12	80	1.573	1.416	0.629	0.126	0.113	0.050
NOSE227M006#0100	E	220	6.3	26.4	12	100	1.407	1.266	0.563	0.141	0.127	0.056
NOSE337M006#0080	E	330	6.3	39.6	12	80	1.573	1.416	0.629	0.126	0.113	0.050
NOSE337M006#0100	E	330	6.3	39.6	12	100	1.407	1.266	0.563	0.141	0.127	0.056
NOSV477M006#0075	V	470	6.3	56.4	12	75	2.000	1.800	0.800	0.150	0.135	0.060

- Insert R for 7" reel or S for 13" reel

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

MSL level: See page 123 (6. Moisture Sensitivity Level) or packaging and reel label.

ESR allowed to move up to 1.25 times catalog limit post mounting.

Note: AVX reserves the rights to supply higher voltage rating in the same case size to the same reliability standards.

OCEAN CHIPS
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Поставка электронных компонентов

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

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения **«JONHON»**, а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов **«FORSTAR»**.

AVIC JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).

FORSTAR®

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