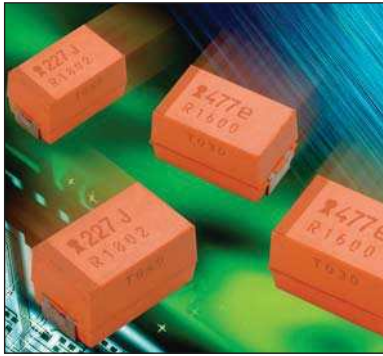


# OxiCap<sup>®</sup> NOM Low ESR Multianodes



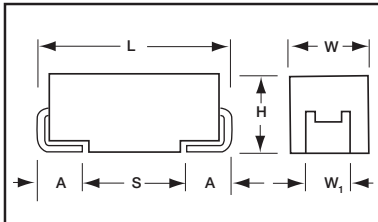
## Niobium Oxide Capacitor



- Multi-anode construction
- Super low ESR
- Non-burn safe technology
- CV range: 220-680 $\mu$ F / 1.8-6.3V
- IBM global approval received in 2004
- Electra award received in 2005



Electra Award  
2005



For part marking see page 130

### CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	L $\pm$ 0.20 (0.008)	W $\pm$ 0.20 (0.008) -0.10 (0.004)	H $\pm$ 0.20 (0.008) -0.10 (0.004)	W $\pm$ 0.20 (0.008)	A $\pm$ 0.30 (0.012) -0.20 (0.008)	S Min.
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)

W<sub>1</sub> dimension applies to the termination width for A dimensional area only.

### HOW TO ORDER

**NOM**

**E**

**227**

**M**

**006**

**R**

**0040**

**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 = Pure Tin 7" Reel  
S = Pure Tin 13" Reel

**ESR in m $\Omega$**

### TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C is not stated				
Capacitance Range:	220 $\mu$ F to 680 $\mu$ F				
Capacitance Tolerance:	±20%				
Leakage Current DCL:	0.02CV				
Rated Voltage DC (V <sub>R</sub> )	≤ +85°C:	1.8	2.5	4	6.3
Category Voltage (V <sub>C</sub> )	≤ +125°C:	0.9	1.3	2	3
Surge Voltage (V <sub>S</sub> )	≤ +85°C:	2.3	3.3	5.2	8
Surge Voltage (V <sub>S</sub> )	≤ +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 <sub>R</sub> , 0.1 $\Omega$ /V series impedance, 60% confidence level Meets requirements of AEC-Q200				



# OxiCap<sup>®</sup> NOM Low ESR Multianodes



## Niobium Oxide Capacitor

### CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC (V <sub>R</sub> ) 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)
220	227				E(40)
330	337			E(35)	E(23,35)
470	477		E(30)	E(23,30)	
680	687	E(23)	E(23)		

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) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	MSL	100kHz RMS Current (A)			100kHz RMS Voltage (V)		
								25°C	85°C	125°C	25°C	85°C	125°C
<b>1.8 Volt @ 85°C (1.2 Volt @ 105°C / 0.9 Volt @ 125°C)</b>													
NOME687M001#0023	E	680	1.8	24.5	6	23	3	3.753	3.378	1.501	0.086	0.078	0.035
<b>2.5 Volt @ 85°C (1.7 Volt @ 105°C / 1.3 Volt @ 125°C)</b>													
NOME477M002#0030	E	470	2.5	23.5	10	30	3	3.286	2.958	1.315	0.099	0.089	0.039
NOME687M002#0023	E	680	2.5	34	6	23	3	3.753	3.378	1.501	0.086	0.078	0.035
<b>4 Volt @ 85°C (2.6 Volt @ 105°C / 2 Volt @ 125°C)</b>													
NOME337M004#0035	E	330	4	26.4	8	35	3	3.043	2.738	1.217	0.106	0.096	0.043
NOME477M004#0023	E	470	4	37.6	6	23	3	3.753	3.378	1.501	0.086	0.078	0.035
NOME477M004#0030	E	470	4	37.6	6	30	3	3.286	2.958	1.315	0.099	0.089	0.039
<b>6.3 Volt @ 85°C (4 Volt @ 105°C / 3 Volt @ 125°C)</b>													
NOME227M006#0040	E	220	6.3	26.4	12	40	3	2.846	2.561	1.138	0.114	0.102	0.046
NOME337M006#0023	E	330	6.3	39.6	6	23	3	3.753	3.378	1.501	0.086	0.078	0.035
NOME337M006#0035	E	330	6.3	39.6	6	35	3	3.043	2.738	1.217	0.106	0.096	0.043

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 125 times catalog limit post mounting.

For typical weight and composition see page 123.

**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.**