

CoreCap® NPV Series

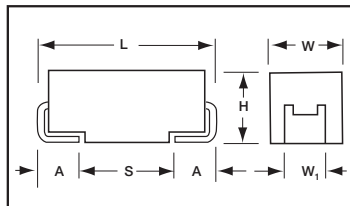
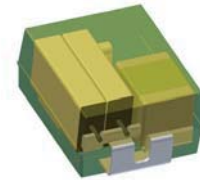


NbO - Ceramic Multianode Chip Capacitors



- Multi-anode construction
- Super low ESR
- Non-burn safe technology
- 3x reflow 260°C compatible
- V-Core filtering and power supply applications (e.g. servers, notebooks etc.)
- CV range: 330-560μF / 2.5-4V

NPV MULTIANODE CONSTRUCTION



For part marking see page 130

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.
V	2924	7361-38	7.30 (0.287)	6.10 (0.240)	3.55 (0.140)	3.10 (0.120)	1.30 (0.051)	4.40 (0.173)

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

HOW TO ORDER

NPV

Type

V

Case Size
See table above

567

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

M

Tolerance
M=±20%

002

Rated DC Voltage
002=2.5Vdc
004=4Vdc

#

Packaging
R = Pure Tin 7" Reel
S = Pure Tin 13" Reel

0003

ESR in mΩ

TECHNICAL SPECIFICATIONS

Technical Data:

All technical data relate to an ambient temperature of +25°C

Capacitance Range: 330 μF to 560 μF

Capacitance Tolerance: ±20%

Leakage Current: 0.02CV (CV = capacitance x voltage)

Voltage Range (V_R) ≤ +85°C: 2.5 4

Category Voltage (V_C) ≤ +105°C: 1.7 2.7

Temperature Range: -55°C to +105°C with category voltage

ESL: Typically 2.5nH below 10MHz

Reliability: 0.2% per 1000 hours at 85°C, 1xV_R with 0.1Ω/V series impedance with 60% confidence level



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CAPACITANCE AND RATED VOLTAGE, VR (VOLTAGE CODE) RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC to 85°C / 0.66 Vr to 125°C				
μF	Code	2.5V (e)	4V (G)	6.3V (J)	10V (A)	16V (C)
330	337		V (3)			
470	477		V (3)			
560	567	V (3)				
680	687					
1000	108					

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)	DCL (μA) Max.	DF % Max.	ESR Max. (mΩ) @300kHz	MSL	100kHz RMS Current (mA)			100kHz RMS Voltage (mV)		
								25°C	85°C	125°C	25°C	85°C	125°C
2.5 Volt @ 85°C (1.7 Volt @ 105°C)													
NPVV567M002#0003	V	560	2.5	28	6	3	3	4619	4157	1848	14	12	6
4 Volt @ 85°C (2.7 Volt @ 105°C)													
NPVV337M004#0003	V	330	4	26.4	6	3	3	4619	4157	1848	14	12	6
NPVV477M004#0003	V	470	4	37.6	6	3	3	4619	4157	1848	14	12	6

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

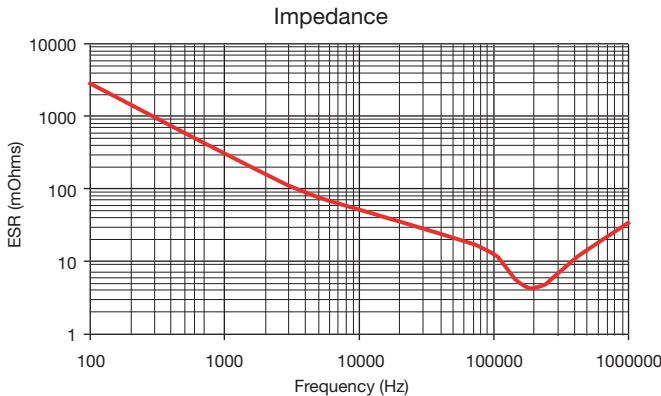
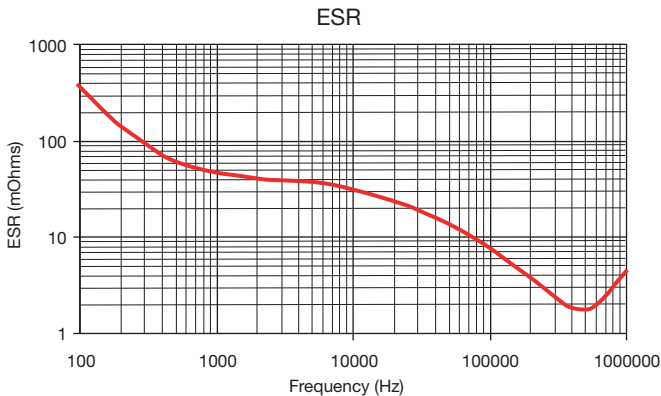
All technical data relates to an ambient temperature of +25°C. Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

The EIA & CECC standards for low ESR solid Tantalum Capacitors allow an ESR movement to 1.25 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.

ESR VS FREQUENCY PLOTS – TYPICAL



Mouser Electronics

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AVX:

[NPVV567M002R0003](#) [NPVV337M004R0003](#) [NPVV477M004R0003](#)