

# CoreCap® NPV Series

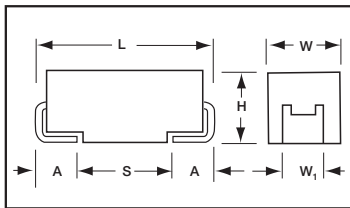
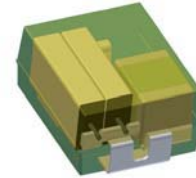


## NbO - Ceramic Multianode Chip Capacitors



- 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 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 <sub>1</sub> ±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)	3.45±0.30 (0.136±0.012)	3.10 (0.120)	1.40 (0.055)	4.40 (0.173)

W<sub>1</sub> 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

**R**

Packaging  
R=7" T/R  
Lead Free  
S=13" T/R  
Lead Free

**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 <sub>R</sub> )	≤ +85°C:	2.5	4
Category Voltage (V <sub>C</sub> )	≤ +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 <sub>R</sub> 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.



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) @300kHz	100kHz Ripple Current (mA)			100kHz Ripple Voltage (mV)		
							25°C	85°C	125°C	25°C	85°C	125°C
<b>2.5 Volt @ 85°C (1.7 Volt @ 105°C)</b>												
NPVV567M002R0003	V	560	2.5	28	6	3	4619	4157	1848	14	12	6
<b>4 Volt @ 85°C (2.7 Volt @ 105°C)</b>												
NPVV337M004R0003	V	330	4	26.4	6	3	4619	4157	1848	14	12	6
NPVV477M004R0003	V	470	4	37.6	6	3	4619	4157	1848	14	12	6

# - 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 maximum DC bias of 2.2V. 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 catalogue limit post mounting.

NPV series is MSL level 3 according to J-STD-020C.

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

### ESR VS FREQUENCY PLOTS - TYPICAL

