

CoreCap® NPV Series



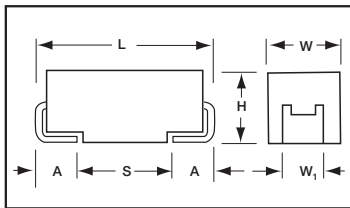
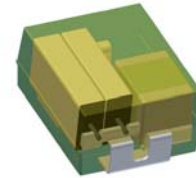
NbO - Ceramic Multianode Chip Capacitors



The NPV series of CoreCap® capacitors offer super low ESR capacitor based on combination of safe and stable OxiCap® and MLCC anodes. The NPV series complies with RoHS requirements and it is an environmentally friendly component ready for lead-free assembly systems up to 3x reflow with 260°C peak temperature. The NPV series is suitable for wide range of V-core filtering and power supplies for processors in servers, notebooks and desktop PC applications.

- Super Low ESR <3mΩ
- RoHS Compatible
- 100% Surge Screened
- 3x reflow 260°C Compatible
- V-Core Filtering Applications
- No Piezo Effect

NPV MULTIANODE CONSTRUCTION



For part marking see page 123

CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	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	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)

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

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:	560 μF		
Capacitance Tolerance:	±20%		
Voltage Range (V _R)	±85°C:	2.5V	4V
Category Voltage (V _C)	±105°C:	1.7V	2.7V
Temperature Range:	-55°C to +105°C with category voltage		
Leakage Current:	0.02CV (CV = capacitance x voltage)		
ESR:	3mΩ at 300kHz @ 25°C		
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		

CoreCap® NPV Series



NbO - Ceramic Multianode Chip Capacitors

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

Capacitance μF	Rated Voltage DC to 85°C / 0.66 V _r to 125°C				
	2.5V (e)	4V (G)	6.3V (J)	10V (A)	16V (C)
330		V (3)			
470		V (3)			
560	V (3)				
680					
1000					

Available Ratings, (ESR ratings in mOhms in brackets)

*Violet - Please Contact Manufacturer



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
2 Volt @ 85°C (1.7 Volt @ 105°C)												
NPVV567M002R0003	V	560	2.5	28	6	3	4000	3600	1600	12	11	5
NPVV337M004R0003	V	330	4	28	6	3	4000	3600	1600	12	11	5
NPVV477M004R0003	V	470	4	28	6	3	4000	3600	1600	12	11	5

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

ESR vs FREQUENCY PLOTS – TYPICAL

