

Type VPR -55 to 105 °C Radial Leaded Aluminum Electrolytic

Low ESR, Optional 3rd Lead Case Styles, Aluminum Electrolytic Capacitors



Type VPR is a radial leaded aluminum electrolytic capacitor with a 105 °C, 2000 hours long life ratings. The VPR has 3 optional case styles with a third lead. The low ESR rating makes it ideal for output filtering in switching power supplies.

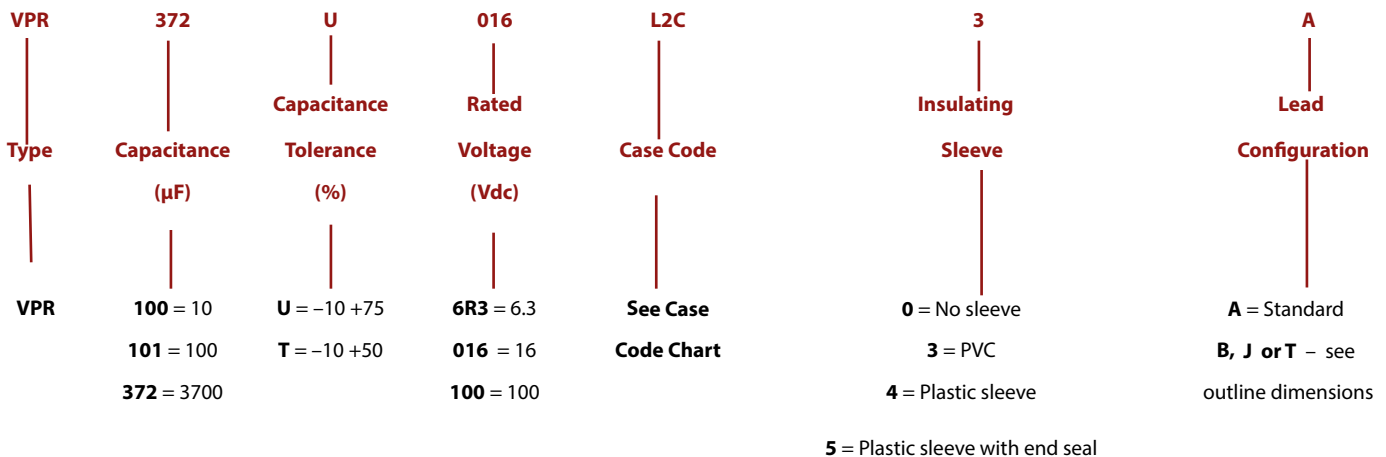
Highlights

- 105 °C
- Long life
- Low ESR
- High reliability

Specifications

Temperature Range	-55 °C to +105 °C														
Rated Voltage Range	6.3 to 100 Vdc (250 Vdc on special request)														
Capacitance Range	250 to 12,000 µF														
Capacitance Tolerance	-10% +75% (others on special request)														
Leakage Current	$I = .002 CV$ after 2 minutes @ 25 °C C = Capacitance in (µF) V = Rated voltage I = Leakage current in µA														
Ripple Current Multipliers	<table border="1"> <thead> <tr> <th>Temperature (°C)</th> <th>45</th> <th>55</th> <th>65</th> <th>75</th> <th>85</th> <th>95</th> </tr> </thead> <tbody> <tr> <td>Multiplier</td> <td>1.66</td> <td>1.52</td> <td>1.37</td> <td>1.2</td> <td>1</td> <td>0.75</td> </tr> </tbody> </table>	Temperature (°C)	45	55	65	75	85	95	Multiplier	1.66	1.52	1.37	1.2	1	0.75
Temperature (°C)	45	55	65	75	85	95									
Multiplier	1.66	1.52	1.37	1.2	1	0.75									
QA Stability Test	Apply WVDC for 2000 h at 105 °C Capacitance change within 15% of initial limits DC leakage current meets initial limits ESR ≤ 150% of initial measured value														
RoHS Compliant															

Part Numbering System



Type VPR -55 to 105 °C Radial Leaded Aluminum Electrolytic

Low ESR, Optional 3rd Lead Case Styles, Aluminum Electrolytic Capacitors

Outline Drawing



PVC sleeve adds .015 to diameter and length.

(Inches)

Case Code

Case Code Chart
Uninsulated Case Size

Case Code	Inches			Millimeters			Lead Wire Size	
	D	L	S	D	L	S	Inches	AWG
L1C	0.875	1.125	0.30	22.2	28.6	7.62	0.04	#18
L1L	0.875	1.625	0.30	22.2	41.3	7.62	0.04	#18
L2C	0.875	2.125	0.30	22.2	53.9	7.62	0.04	#18
L2L	0.875	2.625	0.30	22.2	66.7	7.62	0.04	#18
L3C	0.875	3.125	0.30	22.2	79.4	7.62	0.04	#18
L3L	0.875	3.625	0.30	22.2	92.1	7.62	0.04	#18
N1C	1.000	1.125	0.40	25.4	28.6	10.16	0.04	#18
N1L	1.000	1.625	0.40	25.4	41.3	10.16	0.04	#18
N2C	1.000	2.125	0.40	25.4	53.9	10.16	0.04	#18
N2L	1.000	2.625	0.40	25.4	66.7	10.16	0.04	#18
N3C	1.000	3.125	0.40	25.4	79.4	10.16	0.04	#18
N3L	1.000	3.625	0.40	25.4	92.1	10.16	0.04	#18

Type VPR -55 to 105 °C Radial Leaded Aluminum Electrolytic

Low ESR, Optional 3rd Lead Case Styles, Aluminum Electrolytic Capacitors

Ratings

Cap (μ F)	Catalog Part Number	Max ESR 10 kHz 25 °C (Ω)	Max Ripple 10 kHz 85 °C (A)	Size in. (mm)			
				Diameter (D)	Length (L)	Lead Space (S)	Lead Dia. (d)
6.3 Vdc (8 Volts Surge)							
5,600	VPR562U6R3N1L	0.034	3.767	1.000 (25.4)	1.625 (41.3)	0.40 (10.2)	0.040 (1.0)
8,800	VPR882U6R3N2C	0.023	5.131	1.000 (25.4)	2.125 ((54.0)	0.40 (10.2)	0.040 (1.0)
12,000	VPR123U6R3N2L	0.018	6.364	1.000 (25.4)	2.625 (66.7)	0.40 (10.2)	0.040 (1.0)
7.5 Vdc (10 Volts Surge)							
4,900	VPR492U7R5N1L	0.031	3.820	1.000 (25.4)	1.625 (41.3)	0.40 (10.2)	0.040 (1.0)
10 Vdc (13 Volts Surge)							
4,200	VPR422U010N1L	0.032	3.702	1.000 (25.4)	1.625 (41.3)	0.40 (10.2)	0.040 (1.0)
12 Vdc (18 Volts Surge)							
5,600	VPR562U012N2C	0.021	4.932	1.000 (25.4)	2.125 ((54.0)	0.40 (10.2)	0.040 (1.0)
16 Vdc (20 Volts Surge)							
2,300	VPR232U016L1L	0.040	2.863	0.875 (22.2)	1.625 (41.3)	0.30 (7.6)	0.040 (1.0)
3,200	VPR322U016N1L	0.029	3.637	1.000 (25.4)	1.625 (41.3)	0.40 (10.2)	0.040 (1.0)
3,700	VPR372U016L2C	0.026	3.981	0.875 (22.2)	2.125 ((54.0)	0.30 (7.6)	0.040 (1.0)
5,000	VPR502U016N2C	0.020	4.887	1.000 (25.4)	2.125 ((54.0)	0.40 (10.2)	0.040 (1.0)
6,900	VPR692U016N2L	0.017	6.105	1.000 (25.4)	2.625 (66.7)	0.40 (10.2)	0.040 (1.0)
10,000	VPR103U016N3L	0.012	8.033	1.000 (25.4)	3.625 (92.1)	0.40 (10.2)	0.040 (1.0)
25 Vdc (30 Volts Surge)							
640	VPR641U025E1L	0.067	2.390	0.512 (13.0)	1.654 (42.0)	0.20 (5.1)	0.023 (.58)
1,300	VPR132U025L1L	0.035	2.729	0.875 (22.2)	1.625 (41.3)	0.30 (7.6)	0.040 (1.0)
1,800	VPR182U025N1L	0.035	3.006	1.000 (25.4)	1.625 (41.3)	0.40 (10.2)	0.040 (1.0)
2,800	VPR282U025L2L	0.018	4.732	0.875 (22.2)	2.625 (66.7)	0.30 (7.6)	0.040 (1.0)
2,800	VPR282U025N2C	0.023	4.107	1.000 (25.4)	2.125 ((54.0)	0.40 (10.2)	0.040 (1.0)
3,900	VPR392U025N2L	0.018	5.191	1.000 (25.4)	2.625 (66.7)	0.40 (10.2)	0.040 (1.0)
5,900	VPR592U025N3L	0.014	6.616	1.000 (25.4)	3.625 (92.1)	0.40 (10.2)	0.040 (1.0)

Type VPR -55 to 105 °C Radial Leaded Aluminum Electrolytic

Low ESR, Optional 3rd Lead Case Styles, Aluminum Electrolytic Capacitors

Cap (μ F)	Catalog Part Number	Max ESR 10 kHz 25 °C (Ω)	Max Ripple 10 kHz 85 °C (A)	Size in. (mm)			
				Diameter (D)	Length (L)	Lead Space (S)	Lead Dia. (d)
40 Vdc (50 Volts Surge)							
760	VPR761U040L1L	0.040	2.194	0.875 (22.2)	1.625 (41.3)	0.30 (7.6)	0.040 (1.0)
1,600	VPR162U040N2C	0.021	3.755	1.000 (25.4)	2.125 ((54.0)	0.40 (10.2)	0.040 (1.0)
2,200	VPR222U040N2L	0.017	4.732	1.000 (25.4)	2.625 (66.7)	0.40 (10.2)	0.040 (1.0)
2,800	VPR282U040N3C	0.014	5.651	1.000 (25.4)	3.125 (79.4)	0.40 (10.2)	0.040 (1.0)
3,300	VPR332U040N3L	0.014	6.437	1.000 (25.4)	3.625 (92.1)	0.40 (10.2)	0.040 (1.0)
50 Vdc (65 Volts Surge)							
600	VPR601U050L1L	0.049	1.964	0.875 (22.2)	1.625 (41.3)	0.30 (7.6)	0.040 (1.0)
1200	VPR122U050N2C	0.028	3.297	1.000 (25.4)	2.125 ((54.0)	0.40 (10.2)	0.040 (1.0)
2,400	VPR242U050N3L	0.015	5.639	1.000 (25.4)	3.625 (92.1)	0.40 (10.2)	0.040 (1.0)
75 Vdc (95 Volts Surge)							
450	VPR451U075N1L	0.102	1.779	1.000 (25.4)	1.625 (41.3)	0.40 (10.2)	0.040 (1.0)
680	VPR681U075N2C	0.069	2.420	1.000 (25.4)	2.125 ((54.0)	0.40 (10.2)	0.040 (1.0)
1,100	VPR112U075N3C	0.044	3.577	1.000 (25.4)	3.125 (79.4)	0.40 (10.2)	0.040 (1.0)
100 Vdc (125 Volts Surge)							
250	VPR251U100N1L	0.111	1.818	1.000 (25.4)	1.625 (41.3)	0.40 (10.2)	0.040 (1.0)

Notice and Disclaimer: All product drawings, descriptions, specifications, statements, information and data (collectively, the "Information") in this datasheet or other publication are subject to change. The customer is responsible for checking, confirming and verifying the extent to which the Information contained in this datasheet or other publication is applicable to an order at the time the order is placed. All Information given herein is believed to be accurate and reliable, but it is presented without any guarantee, warranty, representation or responsibility of any kind, expressed or implied. Statements of suitability for certain applications are based on the knowledge that the Cornell Dubilier company providing such statements ("Cornell Dubilier") has of operating conditions that such Cornell Dubilier company regards as typical for such applications, but are not intended to constitute any guarantee, warranty or representation regarding any such matter – and Cornell Dubilier specifically and expressly disclaims any guarantee, warranty or representation concerning the suitability for a specific customer application, use, storage, transportation, or operating environment. The Information is intended for use only by customers who have the requisite experience and capability to determine the correct products for their application. Any technical advice inferred from this Information or otherwise provided by Cornell Dubilier with reference to the use of any Cornell Dubilier products is given gratis (unless otherwise specified by Cornell Dubilier), and Cornell Dubilier assumes no obligation or liability for the advice given or results obtained. Although Cornell Dubilier strives to apply the most stringent quality and safety standards regarding the design and manufacturing of its products, in light of the current state of the art, isolated component failures may still occur. Accordingly, customer applications which require a high degree of reliability or safety should employ suitable designs or other safeguards (such as installation of protective circuitry or redundancies or other appropriate protective measures) in order to ensure that the failure of an electrical component does not result in a risk of personal injury or property damage. Although all product-related warnings, cautions and notes must be observed, the customer should not assume that all safety measures are indicated in such warnings, cautions and notes, or that other safety measures may not be required.