

Type DLP Radial Snap-In Capacitors



- 105°C - Long Life
- 22 to 35 mm Diameters
10 mm Lead Spacing
- High Reliability
- Stable ESR
- Ideally Suited for Use in
Switchable Power Supplies

GENERAL SPECIFICATIONS

Operating Temperature:
-40°C to +105°C

Voltage Range:
16 WVDC to 250 WVDC

Capacitance Range:
100 μ F to 47,000 μ F

Capacitance Tolerance:
 \pm 20% (Standard)

DC Leakage Current:
 $I = .02 CV$

C = Capacitance in μ F

V = Rated Voltage

I = Leakage Current in μ A

QA Stability Test:

Load Life: Apply WVDC for
1,000 hrs at 105°C

- Capacitance change \pm 20%
from initial limits
- DC leakage current meets
initial limits
- ESR \leq 200% of initial
measured value

Shelf Life: 500 hrs, No Voltage
Applied @ 105°C

- Capacitance change \pm 20%
from initial limits
- DC leakage current \leq 200%
of initial measured value
- ESR \leq 200% of initial
measured value

The maximum ripple current at 105°C and 120 Hz for DLP capacitors is shown in the Standard Rating Table. Maximum ripple current may be adjusted by the multipliers in the following tables.

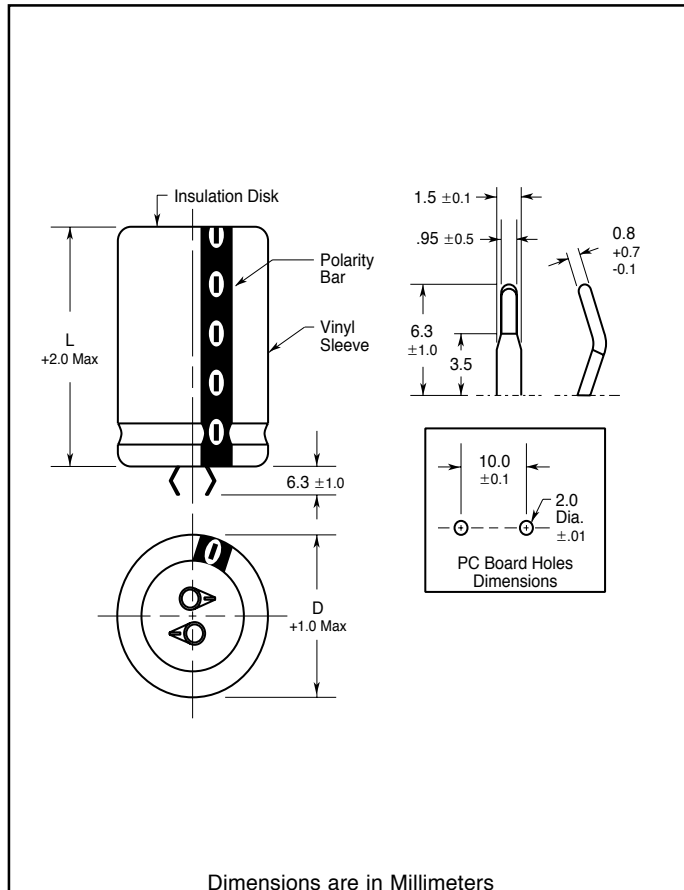
Rated WVDC	Ripple Multipliers					
	50 Hz	1000Hz	300Hz	1000Hz	10kHz	100kHz
10 to 50	.90	1.0	1.03	1.05	1.10	1.10
63 to 100	.85	1.0	1.07	1.13	1.19	1.20
160 to 250	.80	1.0	1.15	1.25	1.35	1.40

Ambient Temperature	Ripple Multiplier
+85°C	1.65
+65°C	2.25
+45°C	2.55

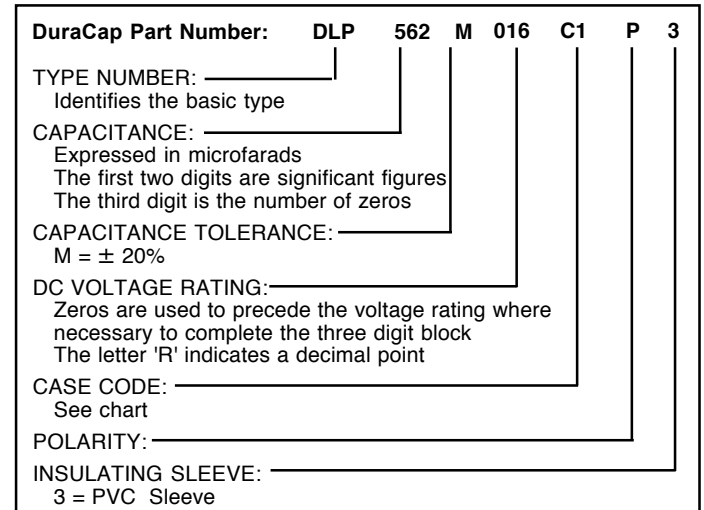
Dissipation Factor @ 120Hz, 25°C				
WV	16	25 - 35	50 - 63	100 - 250
DF(%)	30	25	20	15

For capacitors whose capacitance value exceeds 1000 μ F, the value of DF(%) is increased 2% for every additional 1000 μ F.

Outline Dimensions



Part Number Nomenclature



Case Code Chart

Diameter mm (Inches)	Length Millimeters (Inches)					
	25 (1.00)	30 (1.18)	35 (1.38)	40 (1.57)	45 (1.77)	50 (2.00)
22 (.87)	A1	A3	A5	A7	A4	A9
25 (1.00)	C1	C3	C5	C7	C4	C9
30 (1.18)	E1	E3	E5	E7	E4	E9
35 (1.38)	H1	H3	H5	H7	H4	H9

Type DLP Radial Snap-In Capacitors

Cap μF	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 105°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	
16 WVDC; 25 VDC Surge							
4,700	.141	1.200	.866	.984	22	25	DLP472M016A1P3
5,600	.120	1.429	.984	.984	25	25	DLP562M016C1P3
8,200	.081	1.820	.866	1.378	22	35	DLP822M016A5P3
8,200	.080	1.771	1.181	.984	30	25	DLP822M016E1P3
12,000	.055	2.380	1.181	1.181	30	30	DLP123M016E3P3
15,000	.046	3.000	1.378	1.181	35	30	DLP153M016H3P3
22,000	.030	3.530	1.181	1.575	30	40	DLP223M016E7P3
27,000	.025	4.270	1.378	1.575	35	40	DLP273M016H7P3
33,000	.020	5.000	1.378	1.969	35	50	DLP333M016H9P3

Cap μF	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 105°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	
25 WVDC; 32 VDC Surge							
2,700	.180	1.000	.984	.984	25	25	DLP272M025C1P3
3,300	.151	1.160	.866	.984	22	25	DLP332M025A1P3
3,300	.150	1.143	.984	.984	25	25	DLP332M025C1P3
4,700	.106	1.480	.984	.984	25	25	DLP472M025C1P3
5,600	.090	1.857	1.181	.984	30	25	DLP562M025E1P3
5,600	.089	1.730	.984	1.181	25	30	DLP562M025C3P3
6,800	.073	1.940	.984	1.378	25	35	DLP682M025C5P3
10,000	.050	3.333	1.378	1.181	35	30	DLP103M025H3P3
12,000	.041	2.970	1.378	1.181	35	30	DLP123M025H3P3
15,000	.033	3.360	1.181	1.575	30	40	DLP153M025E7P3
22,000	.023	4.857	1.378	1.969	35	50	DLP223M025H9P3

Cap μF	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 105°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	
35 WVDC; 44 VDC Surge							
1,800	.188	1.040	.866	.984	22	25	DLP182M035A1P3
2,700	.155	1.257	.984	.984	25	25	DLP272M035C1P3
3,900	.108	1.571	1.181	.984	30	25	DLP392M035E1P3
5,600	.074	2.050	1.181	1.181	30	30	DLP562M035E3P3
6,800	.060	2.286	1.181	1.378	30	35	DLP682M035E5P3
6,800	.061	2.320	.984	1.575	25	40	DLP682M035C7P3
8,200	.051	2.690	1.378	1.181	35	30	DLP822M035H3P3
10,000	.041	3.000	1.181	1.575	30	40	DLP103M035E7P3
12,000	.035	3.590	1.378	1.575	35	40	DLP123M035H7P3
15,000	.028	4.000	1.378	1.969	35	50	DLP153M035H9P3

Cap μF	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 105°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	
200 WVDC; 250 VDC Surge							
150	1.650	.509	.984	.984	25	25	DLP151M200C1P3
150	1.650	.509	.866	.984	22	25	DLP151M200A1P3
180	1.400	.571	.984	.984	25	25	DLP181M200C1P3
220	1.100	.646	.984	.984	25	25	DLP221M200C1P3
220	1.100	.646	1.181	.984	30	25	DLP221M200E1P3
220	1.130	.660	.866	1.181	22	30	DLP221M200A3P3
270	.920	.790	1.181	.984	30	25	DLP271M200E1P3
270	.920	.790	.984	1.181	25	30	DLP271M200C3P3
330	.750	.886	1.181	1.181	30	30	DLP331M200E3P3
390	.640	.980	.984	1.378	25	35	DLP391M200C5P3
470	.540	1.143	1.181	1.378	30	35	DLP471M200E5P3
470	.540	1.140	1.181	.984	30	25	DLP471M200E1P3
470	.540	1.143	1.378	1.181	35	30	DLP471M200H3P3
560	.440	1.310	1.378	1.181	35	30	DLP561M200H3P3
680	.370	1.520	1.181	1.181	30	30	DLP681M200E3P3
680	.370	1.510	1.181	1.378	30	35	DLP681M200E5P3
680	.370	1.510	1.378	.984	35	25	DLP681M200H1P3
820	.300	1.750	1.378	1.575	35	40	DLP821M200H7P3
820	.300	1.750	1.378	1.181	35	30	DLP821M200H3P3
1,000	.250	2.114	1.378	1.969	35	50	DLP102M200H9P3
1,000	.250	2.114	1.378	1.378	35	35	DLP102M200H5P3
1,200	.165	2.810	1.181	1.969	30	50	DLP122M200E9P3
1,200	.165	2.740	1.378	1.378	35	35	DLP122M200H5P3
1,500	.134	3.330	1.378	1.772	35	45	DLP152M200H4P3
1,800	.112	3.800	1.378	1.969	35	50	DLP182M200H9P3

Cap μF	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 105°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	
50 WVDC; 63 VDC Surge							
1,200	.280	.860	.866	.984	22	25	DLP122M050A1P3
1,500	.225	.983	.866	.984	22	25	DLP152M050A1P3
2,200	.151	1.330	.866	1.378	22	35	DLP222M050A5P3
2,200	.150	1.429	1.181	.984	30	25	DLP222M050E1P3
3,300	.101	.176	1.181	1.181	30	30	DLP332M050E3P3
3,300	.101	1.710	.984	1.378	25	35	DLP332M050C5P3
3,300	.101	1.710	.984	1.181	25	30	DLP332M050C3P3
3,900	.085	1.970	.984	1.575	25	40	DLP392M050C7P3
4,700	.071	2.270	1.378	1.181	35	30	DLP472M050H3P3
5,600	.059	2.600	1.378	1.378	35	35	DLP562M050H5P3
6,800	.049	3.160	1.181	1.575	30	40	DLP682M050E7P3
6,800	.049	3.160	1.181	1.969	30	50	DLP682M050E9P3
8,200	.040	3.429	1.378	1.969	35	50	DLP822M050H9P3

Cap μF	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 105°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	
63 WVDC; 75 VDC Surge							
820	.300	.770	.866	.984	22	25	DLP821M063A1P3
1,200	.210	.990	.984	.984	25	25	DLP122M063C1P3
1,800	.138	1.340	.866	1.575	22	40	DLP182M063A7P3
1,800	.140	1.371	1.181	.984	30	25	DLP182M063E1P3
2,200	.113	1.550	1.181	1.181	30	30	DLP222M063E3P3
3,300	.076	1.200	1.378	1.181	35	30	DLP332M063H3P3
4,700	.053	2.840	1.181	1.969	30	50	DLP472M063E9P3
6,800	.037	3.360	1.378	1.969	35	50	DLP682M063H9P3

Cap μF	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 105°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	
100 WVDC; 125 VDC Surge							
820	.300	.980	1.181	.984	30	25	DLP821M100E1P3
2,200	.113	2.030	1.378	1.575	35	40	DLP222M100H7P3
2,700	.092	2.320	1.378	1.969	35	50	DLP272M100H9P3
2,700	.092	2.320	1.378	1.575	35	40	DLP272M100H7P3

Cap μF	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 105°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	
250 WVDC; 300 VDC Surge							
100	2.500	.410	.866	.984	22	25	DLP101M250A1P3
150	1.660	.540	.984	.984	25	25	DLP151M250C1P3
180	1.400	.686	.984	1.181	25	30	DLP181M250C3P3
220	1.130	.710	1.181	.984	30	25	DLP221M250E1P3
270	.922	.840	.984	1.181	25	30	DLP271M250C3P3
330	.750	.914	1.181	1.181	30	30	DLP331M250E3P3
390	.640	1.090	1.378	1.181	35	30	DLP391M250H3P3
470	.530	1.260	1.181	1.575	30	40	DLP471M250E7P3
470	.530	1.260	1.378	.984	35	25	DLP471M250H1P3
560	.347	1.800	1.378	1.181	35	30	DLP561M250H3P3
680	.370	1.920	1.181	1.969	30	50	DLP681M250E9P3
680	.370	2.070	1.378	1.378	35	35	DLP681M250H5P3
820	.243	2.400	1.378	1.575	35	40	DLP821M250H7P3
1,000	.200	2.720	1.378	1.772	35	45	DLP102M250H4P3
1,200	.165	3.100	1.378	1.969	35	50	DLP122M250H9P3