

# Type DLPW Radial Snap-In Capacitors



- 85°C - Low Voltage General Purpose
- 22 to 35 mm Diameters  
10 mm Lead Spacing
- Ideal For Input Filter in Consumer Electronic Equipment

## GENERAL SPECIFICATIONS

Operating Temperature:  
-40°C to +85°C

Voltage Range:  
10 WVDC to 100 WVDC

Capacitance Range:  
820  $\mu$ F to 22,000  $\mu$ F

Capacitance Tolerance:  
 $\pm$  20%

DC Leakage Current:  
 $I \leq .03CV$  or 3mA

C = Capacitance in  $\mu$ F  
V = Rated Voltage  
I = Leakage Current in  $\mu$ A

QA Stability Test:  
Apply WVDC for 1,000 hrs at 85°C

- Capacitance change  $\leq$  20% from initial limits
- DC leakage current meets initial limits
- ESR  $\leq$  150% of initial measured value

See Type DLPX for 85°C - High Voltage (160 to 450 WVDC)  
General Purpose Snap Mount Capacitors

The maximum ripple current at 85°C and 120 Hz for DLPW 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				
	60 Hz	120 Hz	1kHz	10kHz	100kHz
10 to 35	.90	1.0	1.05	1.10	1.10
50 to 100	.90	1.0	1.15	1.20	1.20

Cap $\mu$ F	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 85°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	

### 10 WVDC; 13 VDC Surge

Cap $\mu$ F	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 85°C	D (inches)	L (inches)	D (mm)	L (mm)	Catalog Number
8,200	.101	2.39	.866	.984	22	25	DLPW822M1AN25V-W
8,200	.101	2.46	.984	.984	25	25	DLPW822M1AO25V-W
10,000	.083	2.69	.866	1.181	22	30	DLPW103M1AN30V-W
10,000	.083	2.57	.984	.984	25	25	DLPW103M1AO25V-W
12,000	.083	2.81	.866	1.181	22	30	DLPW123M1AN30V-W
12,000	.083	2.84	1.181	.984	30	25	DLPW123M1AP25V-W
15,000	.066	3.14	.866	1.378	22	35	DLPW153M1AN35V-W
15,000	.066	2.97	1.181	.984	30	25	DLPW153M1AP25V-W
22,000	.045	3.79	.866	1.772	22	45	DLPW223M1AN45V-W
22,000	.045	3.45	1.181	1.181	30	30	DLPW223M1AP30V-W

### 16 WVDC; 20 VDC Surge

Cap $\mu$ F	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 85°C	D (inches)	L (inches)	D (mm)	L (mm)	Catalog Number
4,700	.141	1.81	.866	.984	22	25	DLPW472M1CN25V-W
4,700	.141	2.21	.984	.984	25	25	DLPW472M1CO25V-W
6,800	.122	2.40	.866	.984	22	25	DLPW682M1CN25V-W
6,800	.122	2.47	.984	.984	25	25	DLPW682M1CO25V-W
8,200	.101	2.70	.866	1.181	22	30	DLPW822M1CN30V-W
8,200	.101	2.73	1.181	.984	30	25	DLPW822M1CP25V-W
10,000	.083	3.00	.866	1.378	22	35	DLPW103M1CN35V-W
10,000	.083	2.84	1.181	.984	30	25	DLPW103M1CP25V-W
12,000	.069	3.30	.866	1.575	22	40	DLPW123M1CN40V-W
12,000	.069	3.16	1.181	1.181	30	30	DLPW123M1CP30V-W
15,000	.055	3.62	.866	1.772	22	45	DLPW153M1CN45V-W
15,000	.055	3.55	1.378	.984	35	25	DLPW153M1CQ25V-W
22,000	.038	4.25	.984	1.772	25	45	DLPW223M1CO45V-W
22,000	.038	4.37	1.378	1.181	35	30	DLPW223M1CQ30V-W

### 25 WVDC; 32 VDC Surge

Cap $\mu$ F	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 85°C	D (inches)	L (inches)	D (mm)	L (mm)	Catalog Number
3,300	.176	2.03	.866	.984	22	25	DLPW332M1EN25V-W
3,300	.176	2.09	.984	.984	25	25	DLPW332M1EO25V-W
4,700	.159	2.49	.866	1.181	22	30	DLPW472M1EN30V-W
4,700	.159	2.31	.984	.984	25	25	DLPW472M1EO25V-W
6,800	.110	2.87	.866	1.378	22	35	DLPW682M1EN35V-W
6,800	.110	2.72	1.181	.984	30	25	DLPW682M1EP25V-W
8,200	.091	3.16	.866	1.575	22	40	DLPW822M1EN40V-W
8,200	.091	3.03	1.181	1.181	30	30	DLPW822M1EP30V-W
10,000	.075	3.45	.866	1.772	22	45	DLPW103M1EN45V-W
10,000	.075	3.14	1.181	1.181	30	30	DLPW103M1EP30V-W

### Dissipation Factor at 120 Hz, 25°C

WV	10-16	25-35	50-63	100
DF%	30	25	20	15

For capacitors whose capacitance value exceeds 1000 $\mu$ F, the value of DF(%) is decreased 2% for every additional 1000 $\mu$ F.

Ambient Temperature	Ripple Multiplier
+70°C	1.20
+60°C	1.30
+45°C	1.55

Cap $\mu$ F	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 85°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	

### 25 WVDC; 32 VDC Surge

Cap $\mu$ F	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 85°C	D (inches)	L (inches)	D (mm)	L (mm)	Catalog Number
12,000	.062	3.74	.866	1.969	22	50	DLPW123M1EN50V-W
12,000	.062	3.75	1.378	1.181	35	30	DLPW123M1EQ30V-W
15,000	.050	3.78	.984	1.772	25	45	DLPW153M1EO45V-W
15,000	.050	3.89	1.378	1.181	35	30	DLPW153M1EQ30V-W
22,000	.034	4.94	1.181	1.969	30	50	DLPW223M1EP50V-W

### 35 WVDC; 44 VDC Surge

Cap $\mu$ F	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 85°C	D (inches)	L (inches)	D (mm)	L (mm)	Catalog Number
3,300	.176	2.04	.866	.984	22	25	DLPW332M1VN25V-W
3,300	.176	2.10	.984	.984	25	25	DLPW332M1VO25V-W
4,700	.123	2.41	.866	1.181	22	30	DLPW472M1VN30V-W
4,700	.123	2.44	1.181	.984	30	25	DLPW472M1VP25V-W
6,800	.085	2.98	.866	1.575	22	40	DLPW682M1VN40V-W
6,800	.085	2.86	1.181	1.181	30	30	DLPW682M1VP30V-W
8,200	.071	3.25	.866	1.772	22	45	DLPW822M1VN45V-W
8,200	.071	3.42	1.378	1.181	35	30	DLPW822M1VQ30V-W
10,000	.058	3.41	.984	1.772	25	45	DLPW103M1VO45V-W
10,000	.058	3.51	1.378	1.181	35	30	DLPW103M1VQ30V-W
12,000	.048	3.68	.984	1.969	25	50	DLPW123M1VO50V-W
12,000	.048	3.84	1.378	1.378	35	35	DLPW123M1VQ35V-W
15,000	.039	4.08	1.181	1.772	30	45	DLPW153M1VP45V-W

### 50 WVDC; 63 VDC Surge

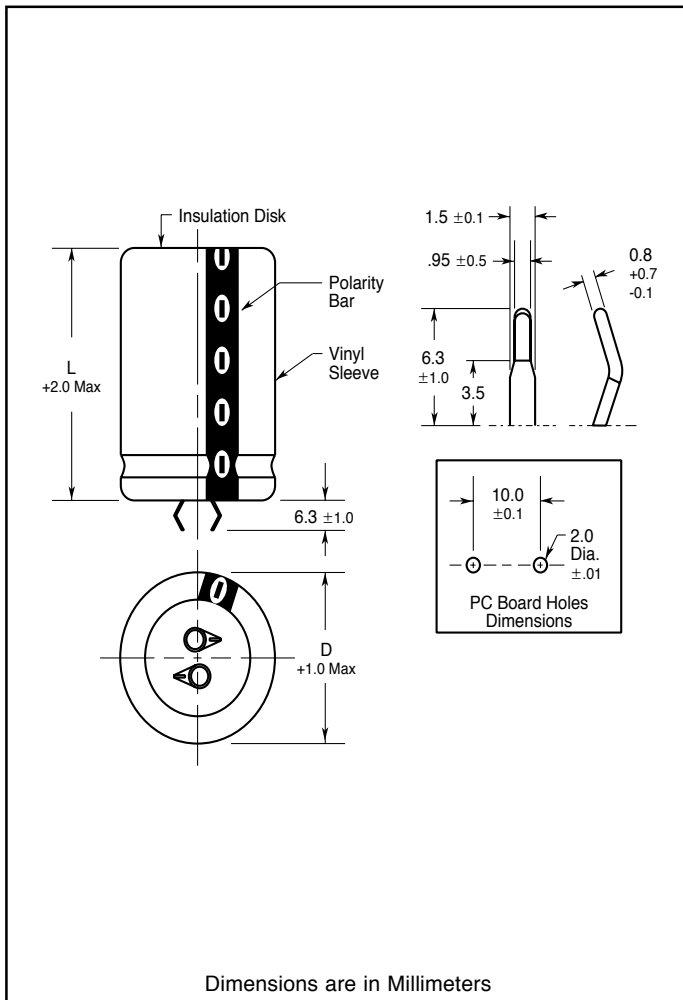
Cap $\mu$ F	Max ESR Ohms @120Hz 25°C	Max Ripple Amps @120Hz 85°C	D (inches)	L (inches)	D (mm)	L (mm)	Catalog Number
2,200	.226	1.92	.866	.984	22	25	DLPW222M1HN25V-W
2,200	.226	1.98	.984	.984	25	25	DLPW222M1HO25V-W
3,300	.151	2.51	.866	1.378	22	35	DLPW332M1HN35V-W
3,300	.151	2.38	1.181	.984	30	25	DLPW332M1HP25V-W
4,700	.106	2.89	.866	1.575	22	40	DLPW472M1HN40V-W
4,700	.106	2.99	1.378	.984	35	25	DLPW472M1HQ25V-W
6,800	.073	3.37	.984	1.772	25	45	DLPW682M1HO45V-W
6,800	.073	3.46	1.378	1.181	35	30	DLPW682M1HQ30V-W
8,200	.061	3.62	.984	1.969	25	50	DLPW822M1HO50V-W
8,200	.061	3.79	1.378	1.378	35	35	DLPW822M1HQ35V-W
10,000	.050	3.72	1.181	1.772	30	45	DLPW103M1HP45V-W

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Cap $\mu$ F	Max ESR Ohms @ 120Hz 25°C	Max Ripple Amps @ 120Hz 85°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	
<b>63 WVDC; 79 VDC Surge</b>							
1,000	.414	1.42	.866	.984	22	25	DLPW102M1JN25V-W
1,000	.414	1.46	.984	.984	25	25	DLPW102M1JO25V-W
1,500	.276	1.74	.866	.984	22	25	DLPW152M1JN25V-W
1,500	.276	1.81	1.181	.984	30	25	DLPW152M1JP25V-W
2,200	.226	2.08	.866	1.181	22	30	DLPW222M1JN30V-W
2,200	.226	2.10	1.181	.984	30	25	DLPW222M1JP25V-W
3,300	.151	2.81	.866	1.772	22	45	DLPW332M1JN45V-W
3,300	.151	2.76	1.378	.984	35	25	DLPW332M1JQ25V-W
4,700	.106	3.11	.984	1.772	25	45	DLPW472M1JO45V-W
4,700	.106	3.20	1.378	1.181	35	30	DLPW472M1JQ30V-W
6,800	.073	3.54	1.181	1.772	30	45	DLPW682M1JP45V-W

Cap $\mu$ F	Max ESR Ohms @ 120Hz 25°C	Max Ripple Amps @ 120Hz 85°C	Size (inches)		Size (millimeters)		Catalog Number
			D	L	D	L	
<b>100 WVDC; 125 VDC Surge</b>							
820	.404	1.55	.866	1.181	22	30	DLPW821M2AN30V-W
820	.404	1.54	.984	.984	25	25	DLPW821M2AO25V-W
1,000	.332	1.71	.866	1.181	22	30	DLPW102M2AN30V-W
1,000	.332	2.20	1.181	.984	30	25	DLPW102M2AP25V-W
1,500	.276	2.38	.866	1.575	22	40	DLPW152M2AN40V-W
1,500	.276	2.54	1.378	1.181	35	30	DLPW152M2AQ30V-W
2,200	.188	2.77	.984	1.772	25	45	DLPW222M2AO45V-W
2,200	.188	3.07	1.378	1.181	35	30	DLPW222M2AQ30V-W
3,300	.126	3.27	1.181	1.772	30	45	DLPW332M2AP45V-W

## Outline Dimensions



## Part Number Nomenclature

DuraCap Part Number: **DLPW 332 M 1J Q 25 V-W**

TYPE NUMBER: \_\_\_\_\_  
Identifies the basic type

CAPACITANCE: \_\_\_\_\_  
Expressed in microfarads  
The first two digits are significant figures  
The third digit is the number of zeros

CAPACITANCE TOLERANCE: \_\_\_\_\_  
M =  $\pm 20\%$

DC VOLTAGE RATING CODE: \_\_\_\_\_  
1A = 10 WVDC    1H = 50 WVDC  
1C = 16 WVDC    1J = 63 WVDC  
1E = 25 WVDC    2A = 100 WVDC  
1V = 35 WVDC

CASE DIAMETER CODE: \_\_\_\_\_  
N = 22 Millimeters  
O = 25 Millimeters  
P = 30 Millimeters  
Q = 35 Millimeters

CASE LENGTH: \_\_\_\_\_  
Millimeters

CASE TYPE and TERMINATION: \_\_\_\_\_  
V = Vented Case  
- = (Dash must be included)  
W = Snap-In Terminals