

Power Type

PL Series

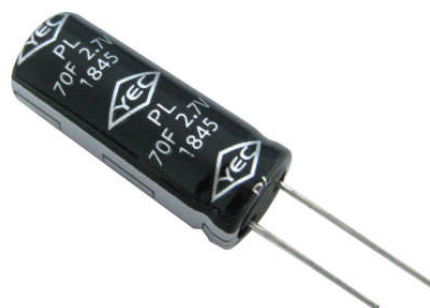


Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)

Recommended Applications

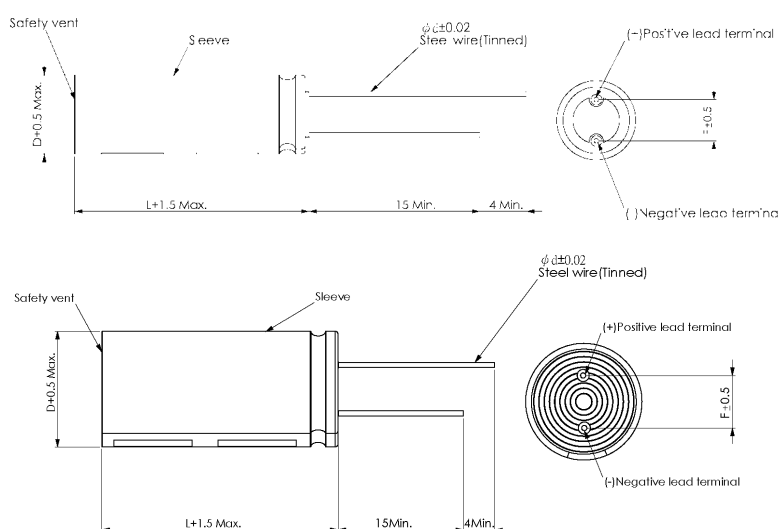
- Pulse power demand
- Hybrid battery packs
- Power tools



Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 °C to 65 °C	-40 °C to 85 °C
Storage Temperature	-40 °C to 70 °C	-40 °C to 85 °C
Endurance	1000hrs @ Operating Temperature at Rated Voltage	ΔC Within $\pm 30\%$ of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @ Storage Temperature without load	
Life time	10y @ 25 °C at Rated Voltage	
Cycle Life	500k cycles	
Cycle: between specified voltage and half voltage under constant current at 25°C		

Dimensions



Size List

Size	D	L	d	F
8X12	8	12	0.6	3.5
8X14	8	14	0.6	3.5
8X16	8	16	0.6	3.5
8X20	8	20	0.6	3.5
8X28	8	28	0.6	3.5
10X20	10	20	0.6	5.0
10X25	10	25	0.6	5.0
10X30	10	30	0.6	5.0
12.5X31.5	12.5	31.5	0.8	5.3
12.5X35.5	12.5	35.5	0.8	5.3
16X26	16	26	0.8	7.5
16X31.5	16	31.5	0.8	7.5
18X40	18	40	0.8	7.5
18X45	18	45	0.8	7.5
18X60	18	60	1	7.5
22X45	22	45	1	9.5

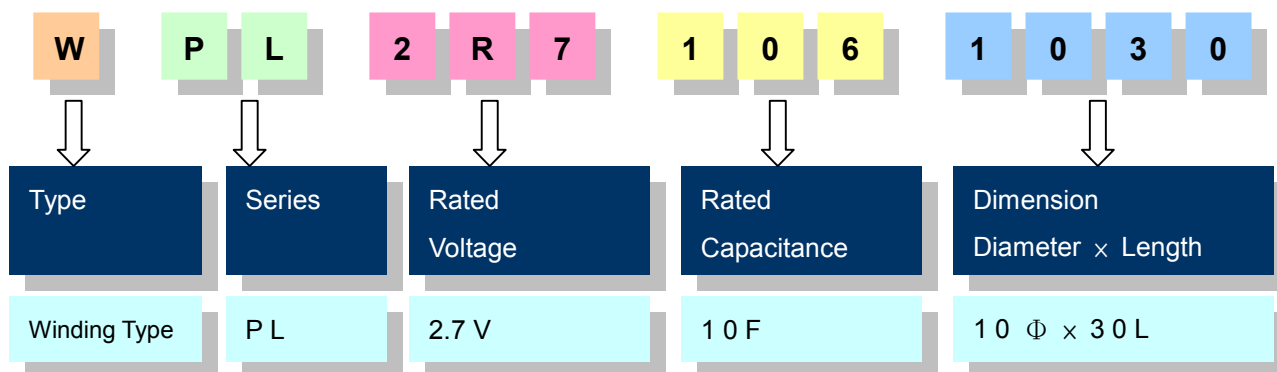


Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy			Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)		Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)		
0.5	8X12	700	1800	0.002	0.0005	0.5063	0.8397		486	1013	0.355	0.05	1.50	1	WPL2R75040812
1	8X12	315	700	0.006	0.0010	0.9205	1.6794		1136	2367	0.794	0.1	3.86	1.1	WPL2R71050812
1.5	8X14	190	410	0.008	0.0015	1.2656	2.1593		1778	3704	1.254	0.15	6.59	1.2	WPL2R71550814
2	8X16	180	350	0.010	0.0020	1.5577	2.5192		1923	4005	1.588	0.2	7.71	1.3	WPL2R72050816
3.3	8X20	190	300	0.012	0.0033	2.0250	3.3253		1767	3682	2.239	0.33	9.00	1.65	WPL2R73350820
4	10X20	150	250	0.014	0.0041	1.8409	2.5796		1591	3314	2.700	0.4	10.80	2.2	WPL2R74051020
5	10X20	90	160	0.015	0.0051	2.2011	3.2245		2377	4952	3.750	0.5	16.88	2.3	WPL2R75051020
6	8X28	80	140	0.015	0.0061	2.6413	4.3186		2717	5660	4.402	0.6	19.29	2.3	WPL2R76050828
6	10X20	70	130	0.015	0.0061	2.4300	3.8694		2692	5608	4.551	0.6	20.77	2.5	WPL2R76051020
8	10X25	60	100	0.020	0.0081	2.7000	4.1274		2916	6075	6.000	0.8	27.00	3	WPL2R78051025
10	10X30	60	85	0.030	0.0101	2.8929	4.2994		2941	6126	7.297	1.0	31.76	3.5	WPL2R71061030
15	12.5X31.5	35	60	0.035	0.0152	2.8656	3.9308		2751	5731	10.658	1.5	45.00	5.3	WPL2R71561232
22	12.5X35.5	30	45	0.055	0.0223	3.4269	5.1156		2991	6231	14.925	2.2	60.00	6.5	WPL2R72261236
25	16X26	28	42	0.060	0.0253	3.3750	4.8445		2777	5786	16.463	2.5	64.29	7.5	WPL2R72561626
30	16X31.5	25	35	0.080	0.0304	3.4517	4.7984		2840	5917	19.756	3.0	77.14	8.8	WPL2R73061632
50	18X40	15	20	0.130	0.0506	3.8942	4.9761		3365	7010	33.750	5.0	135.0	13	WPL2R75061840
70	18X45	13	20	0.150	0.0709	4.2955	6.1925		2651	5523	39.375	7.0	135.0	16.5	WPL2R77061845
100	18x60	10	16	0.260	0.1013	4.6023	6.6348		2485	5178	51.923	10.0	168.7	22	WPL2R71071860
100	22X45	10	15	0.260	0.1013	4.4022	5.9220		2536	5283	54.000	10.0	180.0	23	WPL2R71072245

Note. If standard product does not meet your need, please contact us to enquire for customized one.

Part Numbering System





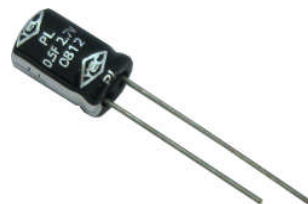
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Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
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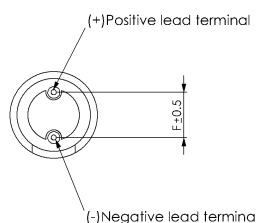
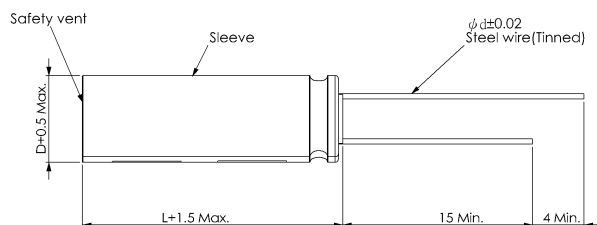
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Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
	Cycle: between specified voltage and half voltage under constant current at 25℃	

Dimensions



D	L	d	F
8	12	0.6	3.5

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Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy			Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)		Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)		
0.5	8X12	700	1800	0.002	0.0005	0.5063	0.8397		486	1013	0.355	0.05	1.50	1	WPL2R75040812





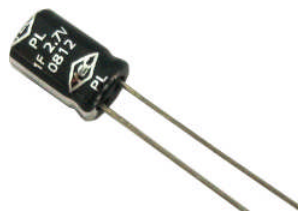
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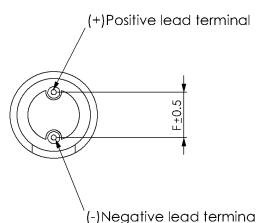
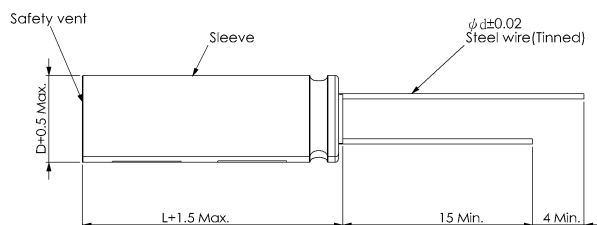
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measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)		Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)		
1	8X12	315	700	0.006	0.0010	0.9205	1.6794		1136	2367	0.794	0.1	3.86	1.1	WPL2R71050812





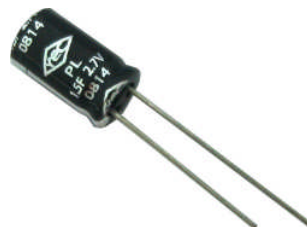
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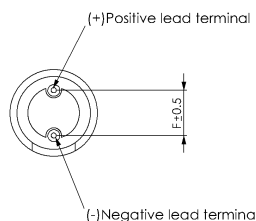
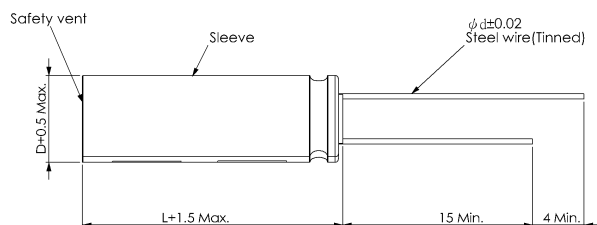
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Cycle Life	500k cycles	
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Dimensions



D	L	d	F
8	14	0.6	3.5

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max.Peak Current	Max. continuous current	ISC	Max. Weight (g)	Part Number
		AC (1kHz, 1V)	DC			72hrs, 25℃	(Wh)	(Wh/kg)	(Wh/l)					
measure at 25℃	ΦDXL													
 1.5	8X14	190	410	0.008	0.0015	1.2656	2.1593	1778	3704	1.254	0.15	6.59	1.2	WPL2R71550814





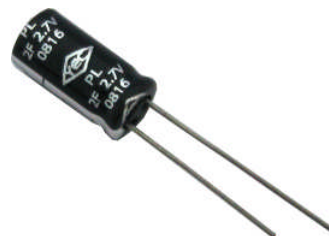
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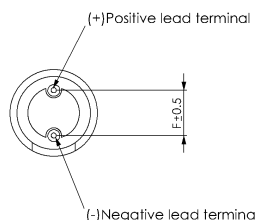
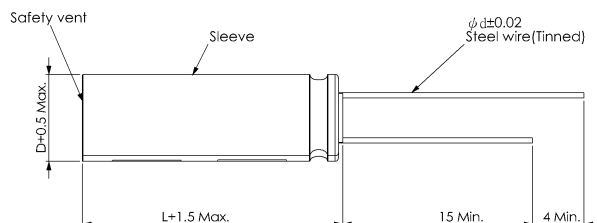
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Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
	Cycle: between specified voltage and half voltage under constant current at 25℃	

Dimensions



D	L	d	F
8	16	0.6	3.5

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy			Specific Power	Max. Peak Current	Max. continuous current	ISC	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
2	8X16	180	350	0.010	0.0020	1.5577	2.5192	1923	4005	1.588	0.2	7.71	1.3	WPL2R72050816





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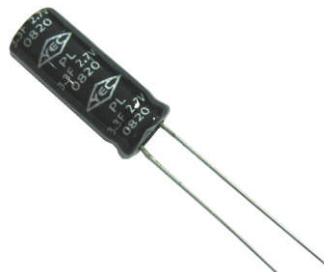


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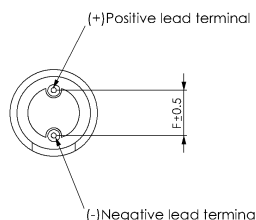
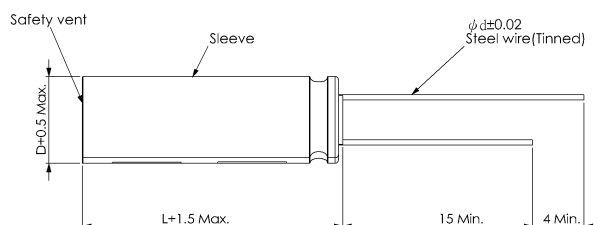
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measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
3.3	8X20	190	300	0.012	0.0033	2.0250	3.3253	1767	3682	2.239	0.33	9.00	1.65	WPL2R73350820





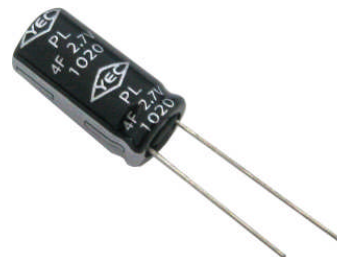
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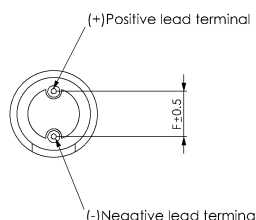
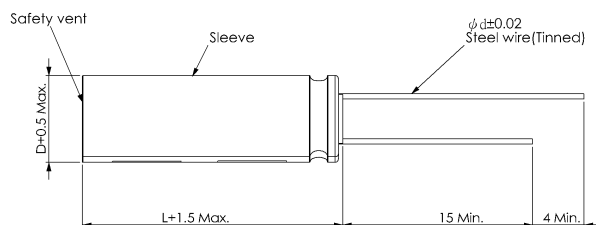
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 4	10X20	150	250	0.014	0.0041	1.8409	2.5796	1591	3314	2.700	0.4	10.80	2.2	WPL2R74051020





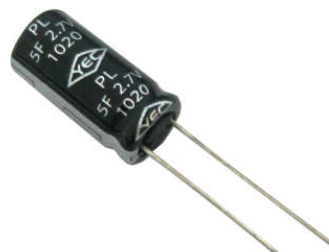
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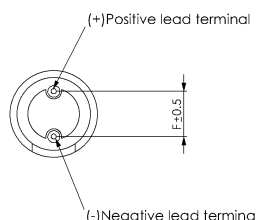
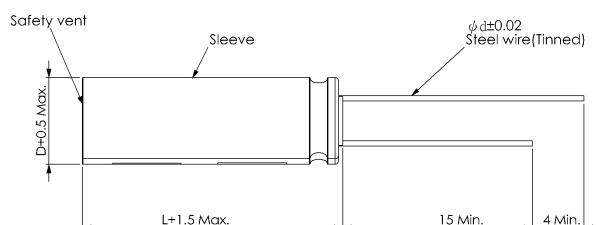
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measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)		Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)		
5	10X20	90	160	0.015	0.0051	2.2011	3.2245		2377	4952	3.750	0.5	16.88	2.3	WPL2R75051020





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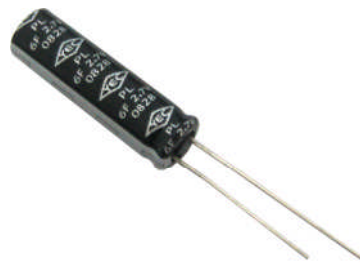


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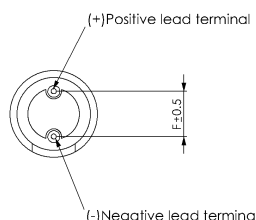
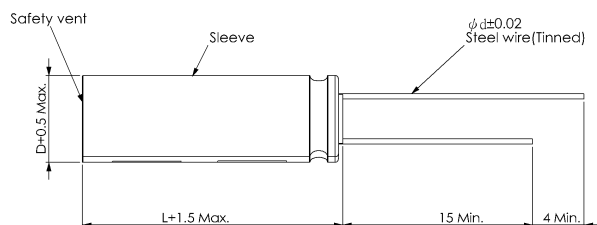
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Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
	Cycle: between specified voltage and half voltage under constant current at 25℃	

Dimensions



D	L	d	F
8	28	0.6	3.5

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy			Specific Power		Max. Peak Current	Max. continuous current	ISC	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)		Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)		
6	8X28	80	140	0.015	0.0061	2.6413	4.3186		2717	5660	4.402	0.6	19.29	2.3	WPL2R76050828





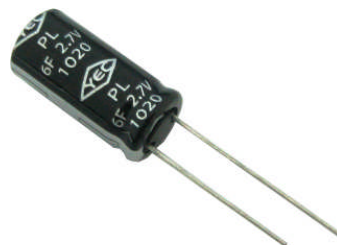
Power Type

PL Series



Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)



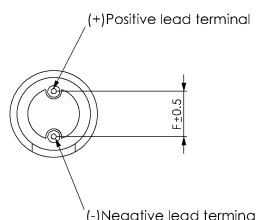
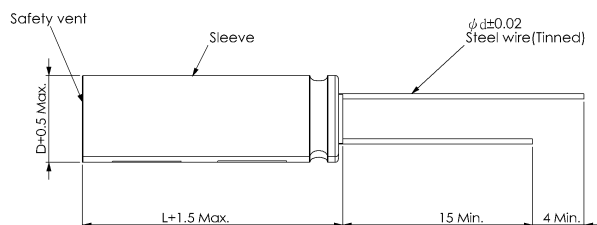
Recommended Applications

- Pulse power demand
- Hybrid battery packs
- Power tools

Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
Cycle: between specified voltage and half voltage under constant current at 25℃		

Dimensions



D	L	d	F
10	20	0.6	5.0

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
6	10X20	70	130	0.015	0.0061	2.4300	3.8694	2692	5608	4.551	0.6	20.77	2.5	WPL2R76051020





Power Type

PL Series

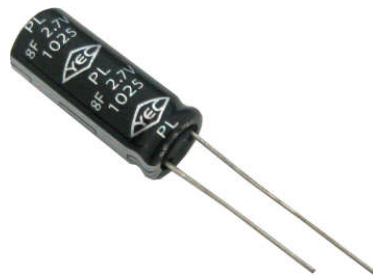


Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)

Recommended Applications

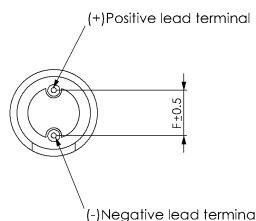
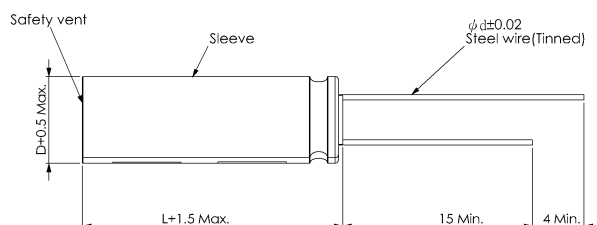
- Pulse power demand
- Hybrid battery packs
- Power tools



Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
	Cycle: between specified voltage and half voltage under constant current at 25℃	

Dimensions



D	L	d	F
10	25	0.6	5.0

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
8	10X25	60	100	0.020	0.0081	2.7000	4.1274	2916	6075	6.000	0.8	27.00	3	WPL2R78051025





Power Type

PL Series

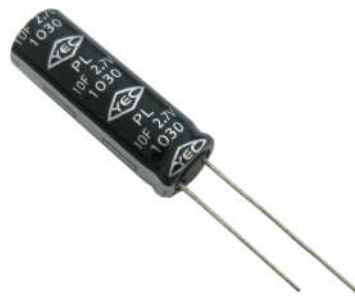


Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)

Recommended Applications

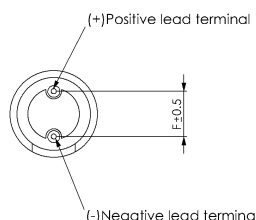
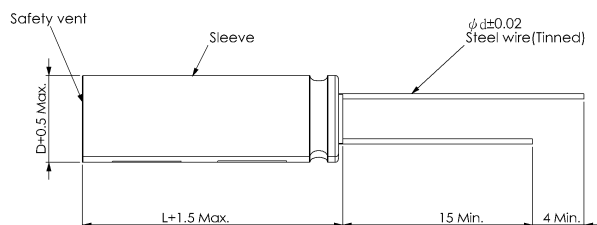
- Pulse power demand
- Hybrid battery packs
- Power tools



Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
	Cycle: between specified voltage and half voltage under constant current at 25℃	

Dimensions



D	L	d	F
10	30	0.6	5.0

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	ISC	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
10	10X30	60	85	0.030	0.0101	2.8929	4.2994	2941	6126	7.297	1.0	31.76	3.5	WPL2R71061030





Power Type

PL Series

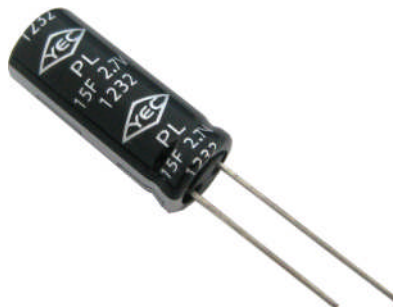


Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)

Recommended Applications

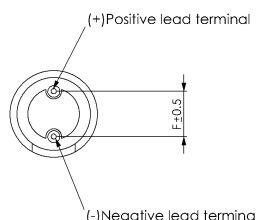
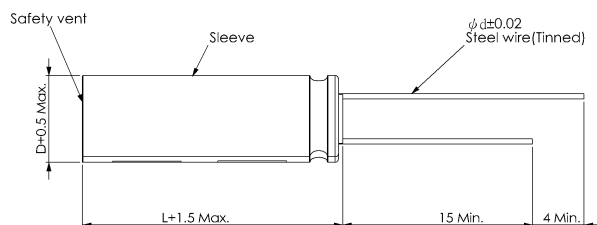
- Pulse power demand
- Hybrid battery packs
- Power tools



Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
	Cycle: between specified voltage and half voltage under constant current at 25℃	

Dimensions



D	L	d	F
12.5	31.5	0.8	5.3

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25℃	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25℃	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)		
 15	12.5X31.5	35	60	0.035	0.0152	2.8656	3.9308	2751	5731	10.658	1.5	45.00	5.3	WPL2R71561232





Power Type

PL Series

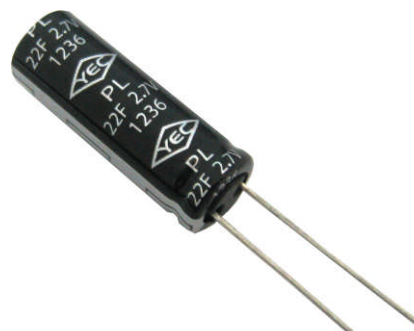


Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)

Recommended Applications

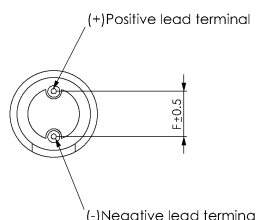
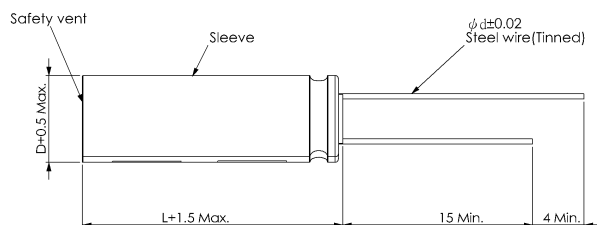
- Pulse power demand
- Hybrid battery packs
- Power tools



Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 °C to 65 °C	-40 °C to 85 °C
Storage Temperature	-40 °C to 70 °C	-40 °C to 85 °C
Endurance	1000hrs @ Operating Temperature at Rated Voltage	ΔC Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @ Storage Temperature without load	
Life time	10y @ 25 °C at Rated Voltage	
Cycle Life	500k cycles	
Cycle: between specified voltage and half voltage under constant current at 25°C		

Dimensions



D	L	d	F
12.5	35.5	0.8	5.3

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
22	12.5X35.5	30	45	0.055	0.0223	3.4269	5.1156	2991	6231	14.925	2.2	60.00	6.5	WPL2R72261236





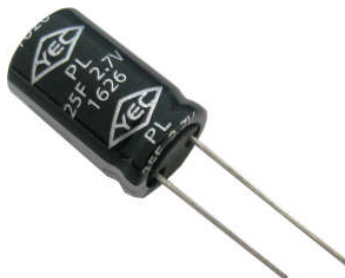
Power Type

PL Series



Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)



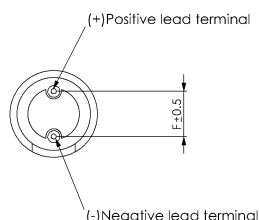
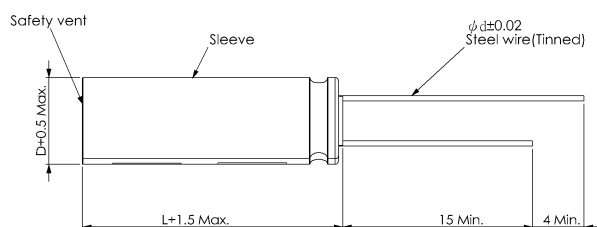
Recommended Applications

- Pulse power demand
- Hybrid battery packs
- Power tools

Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
Cycle: between specified voltage and half voltage under constant current at 25℃		

Dimensions



D	L	d	F
16	26	0.8	7.5

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
25	16X26	28	42	0.060	0.0253	3.3750	4.8445	2777	5786	16.463	2.5	64.29	7.5	WPL2R72561626





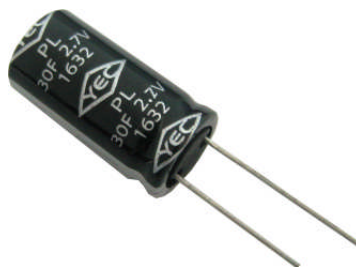
Power Type

PL Series



Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)



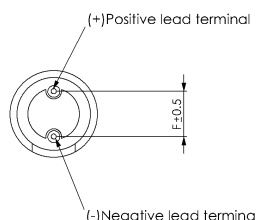
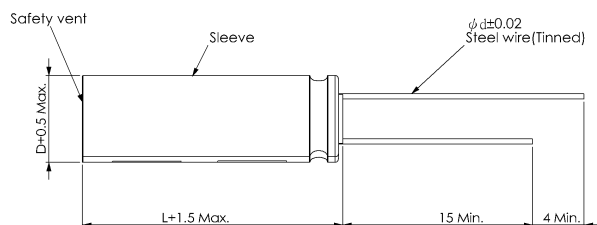
Recommended Applications

- Pulse power demand
- Hybrid battery packs
- Power tools

Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
	Cycle: between specified voltage and half voltage under constant current at 25℃	

Dimensions



D	L	d	F
16	31.5	0.8	7.5

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
30	16X31.5	25	35	0.080	0.0304	3.4517	4.7984	2840	5917	19.756	3.0	77.14	8.8	WPL2R73061632





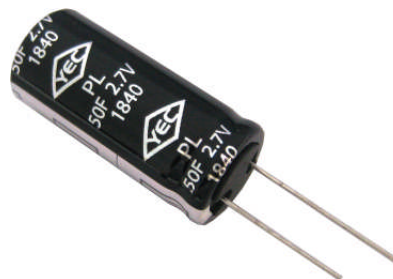
Power Type

PL Series



Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)



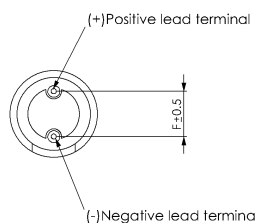
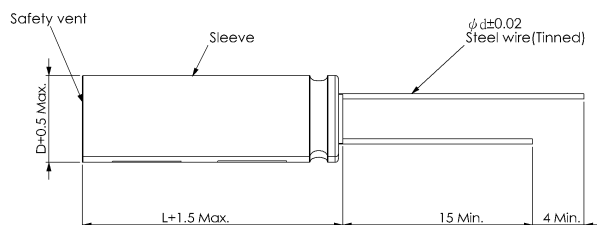
Recommended Applications

- Pulse power demand
- Hybrid battery packs
- Power tools

Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
	Cycle: between specified voltage and half voltage under constant current at 25℃	

Dimensions



D	L	d	F
18	40	0.8	7.5

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
50	18X40	15	20	0.130	0.0506	3.8942	4.9761	3365	7010	33.750	5.0	135.0	13	WPL2R75061840





Power Type

PL Series

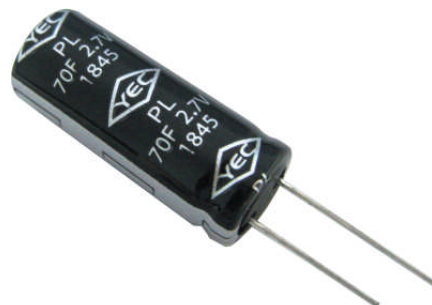


Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)

Recommended Applications

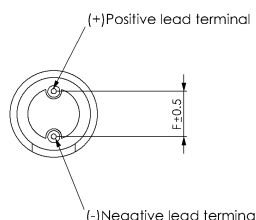
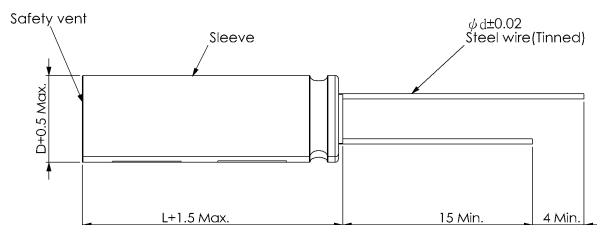
- Pulse power demand
- Hybrid battery packs
- Power tools



Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
Cycle: between specified voltage and half voltage under constant current at 25℃		

Dimensions



D	L	d	F
18	45	0.8	7.5

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25℃	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25℃	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)		
 70	18X45	13	20	0.150	0.0709	4.2955	6.1925	2651	5523	39.375	7.0	135.0	16.5	WPL2R77061845





Power Type

PL Series

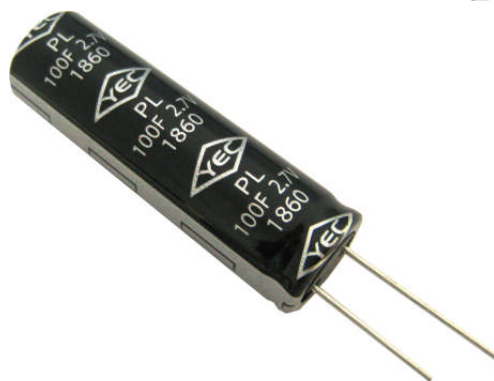


Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)

Recommended Applications

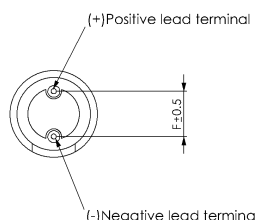
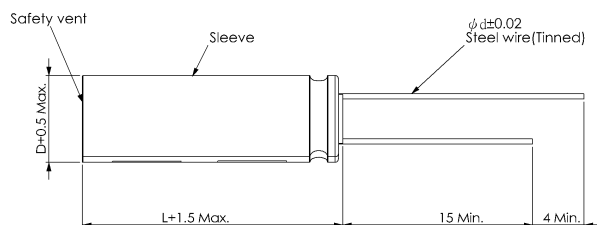
- Pulse power demand
- Hybrid battery packs
- Power tools



Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
	Cycle: between specified voltage and half voltage under constant current at 25℃	

Dimensions



D	L	d	F
18	60	1.0	7.5

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
100	18x60	10	16	0.260	0.1013	4.6023	6.6348	2485	5178	51.923	10.0	168.7	22	WPL2R71071860





Power Type

PL Series

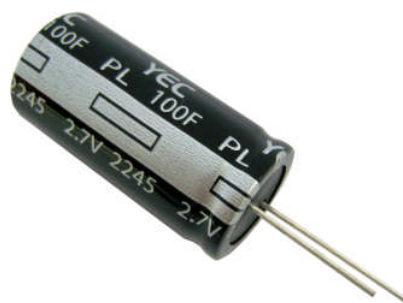


Features

- Small size and low-resistance
- Quick charge & discharge
- Environmentally friendly products
- RoHS & REACH compliant
- UL recognized (File No. MH10260)

Recommended Applications

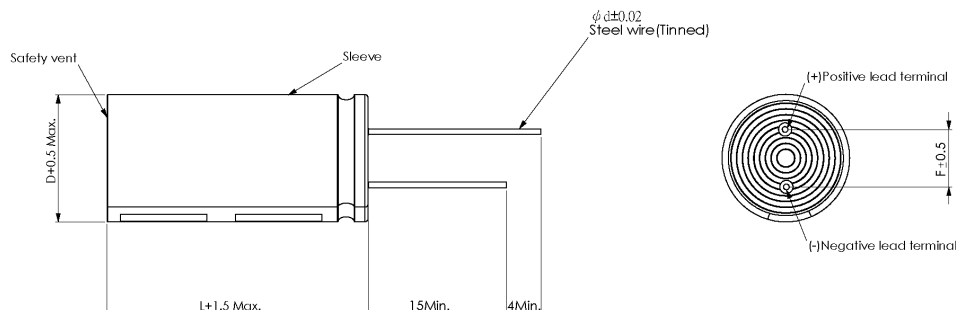
- Pulse power demand
- Hybrid battery packs
- Power tools



Specification

Items	Characteristics	
Rated Voltage	2.7 V	2.3 V
Surge Voltage	2.85 V	2.85 V
Capacitance Tolerance	-20 % / +20 %	-20 % / +20 %
Operating Temperature	-40 ℃ to 65 ℃	-40 ℃ to 85 ℃
Storage Temperature	-40 ℃ to 70 ℃	-40 ℃ to 85 ℃
Endurance	1000hrs @ Operating Temperature at Rated Voltage	△C Within ±30% of initial measured value ESR Within 2 times of initial specified value
Shelf Life	1000hrs @Storage Temperature without load	
Life time	10y @ 25 ℃ at Rated Voltage	
Cycle Life	500k cycles	
	Cycle: between specified voltage and half voltage under constant current at 25℃	

Dimensions



D	L	d	F
22	45	1.0	9.5

Standard Ratings

Rated Cap (F)	Size (mm)	Max. Internal Resistance (mΩ)		Max. LC (mA)	Stored Energy	Specific Energy		Specific Power		Max. Peak Current	Max. continuous current	Isc	Max. Weight (g)	Part Number
measure at 25°C	ΦDXL	AC (1kHz, 1V)	DC	72hrs, 25°C	(Wh)	(Wh/kg)	(Wh/l)	Pd (W/kg)	Pmax (W/kg)	1s to 1/2V (A)	(A)	(A)	(g)	
100	22X45	10	15	0.260	0.1013	4.4022	5.9220	2536	5283	54.000	10.0	180.0	23	WPL2R71072245

