

# DX 6

HIGH VOLTAGE DC CAPACITORS

HIGH CURRENT METALLIZED POLYPROPYLENE  
WITH DOUBLE SIDED MET CURRENT CARRIERS  
CUSTOM DESIGNS AVAILABLE



## MAIN FEATURES:

- SELF-HEALING METALLIZED POLYPROPYLENE DOUBLE SIDE FILM
- TAPE WRAP CASE
- EPOXY RESIN FILLING

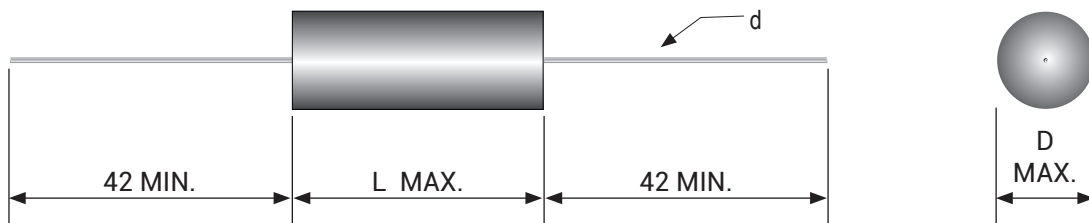


## MAIN APPLICATIONS:

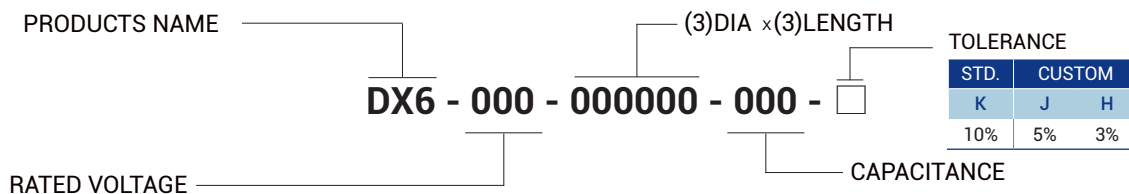
- MEDIUM VOLTAGE, HIGH CURRENT, HIGH PULSE APPLICATIONS
- ENERGY CONVERSION AND CONTROL  
IN POWER SEMICONDUCTOR CIRCUITS
- SMPS, MOTOR SPEED CONTROLS



## DIMENSIONS [mm]



## ORDERING INFORMATION



ALL SPECIFICATIONS MAY CHANGE WITHOUT NOTICE

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## SPECIFICATIONS

DC VOLTAGE RANGE	600~10000 VDC
CAPACITANCE RANGE	UP TO 6 $\mu$ F
CAPACITANCE TOLERANCE (AT 1kHz)	STANDARD: $\pm$ 10% ON REQUEST $\pm$ 3, 5%
EQUIVALENT SERIES RESISTANCE (ESR)	< 4.5 m $\Omega$
MAXIMUM VOLTAGE RATE OF RISE(dV/dT)	$\leq$ 2800 V/ $\mu$ s
TERMINALS	TIN COPPER WIRE
VOLTAGE TEST	RATED VOLTAGE X 1.5 TIMES FOR 10 SECS
WORKING & STORAGE TEMPERATURE	-55 / +85 $^{\circ}$ C
CYLINDRICAL CASE AND FILLING	FLAME RETARDANT EPOXY RESIN FILL AND TAPE WRAP
PROTECTIVE MECHANISM	SELF HEALING
LIFE EXPECTANCY	100,000 HOURS TYP.
SOLDERING HEAT TEST	TEMPERATURE = 260 $\pm$ 5 $^{\circ}$ C FOR 10 SECS
DISSIPATION FACTOR	DF VALUE $\leq$ 0.05 %, MEASURED AT 25 $\pm$ 5 $^{\circ}$ C, 1 kHz
INSULATION RESISTANCE (RINS)	C $\leq$ 0.33 $\mu$ F $\geq$ 100,000M $\Omega$ , C > 0.33 $\mu$ F $\geq$ 30,000 SEC (M $\Omega$ X $\mu$ F) AT 25 $\pm$ 5 $^{\circ}$ C, AFTER 1 MINUTE OF ELECTRIFICATION AT 500VDC

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600VDC, RATED VOLTAGE								
VOLTAGE [V]		CAP <sup>(3)</sup>	DIMENSIONS [mm]			LEAD	CURRENT	ORDERING CODE
VDC	V-PEAK <sup>(1)</sup>	μF	D MAX.	L	d	AWG	I-PEAK <sup>(2)</sup> [A]	
600	950	0.1	11	40	0.8	20	50	DX6-006-011040-104-K
600	950	0.15	12	40	0.8	20	75	DX6-006-012040-154-K
600	950	0.22	14	40	0.8	20	110	DX6-006-014040-224-K
600	950	0.33	17	40	0.8	20	165	DX6-006-017040-334-K
600	950	0.47	20	40	0.8	20	235	DX6-006-020040-474-K
600	950	0.68	24	40	1	18	340	DX6-006-024040-684-K
600	950	1	28	40	1	18	500	DX6-006-028040-105-K
600	950	1.2	23	60	1	18	360	DX6-006-023060-125-K
600	950	1.5	25	60	1	18	450	DX6-006-025060-155-K
600	950	2	28	60	1.2	16	600	DX6-006-028060-205-K
600	950	2.2	29	60	1.2	16	660	DX6-006-029060-225-K
600	950	2.5	31	60	1.2	16	750	DX6-006-031060-255-K
600	950	3	34	60	1.2	16	900	DX6-006-034060-305-K
600	950	3.3	36	60	1.2	16	990	DX6-006-036060-335-K
600	950	3.7	38	60	1.2	16	1110	DX6-006-038060-375-K
600	950	4	39	60	1.2	16	1200	DX6-006-039060-405-K
600	950	4.7	40	60	1.2	16	1410	DX6-006-040060-475-K
600	950	5	43	60	1.2	16	1500	DX6-006-043060-505-K
600	950	5.6	45	60	1.2	16	1680	DX6-006-045060-565-K
600	950	6	47	60	1.2	16	1800	DX6-006-047060-605-K

\*\*CAPACITANCE AND THREADS TERMINAL AVAILABLE AS CUSTOM.

(1) NON-REPETITIVE PEAK VOLTAGE LESS THAN 00μs TYP.

(2) NON-REPETITIVE PEAK CURRENT LESS THAN 00μs TYP.

(3) MEASURED AT 1kHz ±20Hz AT 25°C

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800VDC, RATED VOLTAGE								
VOLTAGE [V]		CAP <sup>(3)</sup>	DIMENSIONS [mm]			LEAD	CURRENT	ORDERING CODE
VDC	V-PEAK <sup>(1)</sup>	μF	D MAX.	L	d	AWG	I-PEAK <sup>(2)</sup> [A]	
800	1250	0.1	12	40	0.8	20	65	DX6-008-012040-104-K
800	1250	0.15	14	40	0.8	20	97.5	DX6-008-014040-154-K
800	1250	0.22	17	40	0.8	20	143	DX6-008-017040-224-K
800	1250	0.33	20	40	0.8	20	215	DX6-008-020040-334-K
800	1250	0.47	23	40	1	18	306	DX6-008-023040-474-K
800	1250	0.68	27	40	1	18	442	DX6-008-027040-684-K
800	1250	1	23	60	1	18	400	DX6-008-023060-105-K
800	1250	1.2	25	60	1	18	480	DX6-008-025060-125-K
800	1250	1.5	28	60	1.2	16	600	DX6-008-028060-155-K
800	1250	2	32	60	1.2	16	800	DX6-008-032060-205-K
800	1250	2.2	35	60	1.2	16	880	DX6-008-035060-225-K
800	1250	2.5	36	60	1.2	16	1000	DX6-008-036060-255-K
800	1250	3	39	60	1.2	16	1200	DX6-008-039060-305-K
800	1250	3.3	41	60	1.2	16	1320	DX6-008-041060-335-K
800	1250	3.7	43	60	1.2	16	1480	DX6-008-043060-375-K
800	1250	4	45	60	1.2	16	1600	DX6-008-045060-405-K

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1000VDC, RATED VOLTAGE								
VOLTAGE [V]		CAP <sup>(3)</sup>	DIMENSIONS [mm]			LEAD	CURRENT	ORDERING CODE
VDC	V-PEAK <sup>(1)</sup>	μF	D MAX.	L	d	AWG	I-PEAK <sup>(2)</sup> [A]	
1000	1550	0.1	13	40	0.8	20	82	DX6-010-013040-104-K
1000	1550	0.15	16	40	0.8	20	123	DX6-010-016040-154-K
1000	1550	0.22	18	40	0.8	20	180	DX6-010-018040-224-K
1000	1550	0.33	22	40	0.8	20	271	DX6-010-022040-334-K
1000	1550	0.47	26	40	1	18	385	DX6-010-026040-474-K
1000	1550	0.68	22	60	1	18	340	DX6-010-022060-684-K
1000	1550	1	25	60	1.2	16	500	DX6-010-025060-105-K
1000	1550	1.2	28	60	1.2	16	600	DX6-010-028060-125-K
1000	1550	1.5	31	60	1.2	16	750	DX6-010-031060-155-K
1000	1550	2	36	60	1.2	16	1000	DX6-010-036060-205-K
1000	1550	2.2	38	60	1.2	16	1100	DX6-010-038060-225-K
1000	1550	2.5	40	60	1.2	16	1250	DX6-010-040060-255-K

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1200VDC, RATED VOLTAGE								
VOLTAGE [V]		CAP <sup>(3)</sup>	DIMENSIONS [mm]			LEAD	CURRENT	ORDERING CODE
VDC	V-PEAK <sup>(1)</sup>	μF	D MAX.	L	d	AWG	I-PEAK <sup>(2)</sup> [A]	
1200	1800	0.047	11	40	0.8	20	47	DX6-012-011040-473-K
1200	1800	0.068	13	40	0.8	20	68	DX6-012-013040-683-K
1200	1800	0.1	15	40	0.8	20	100	DX6-012-015040-104-K
1200	1800	0.15	18	40	0.8	20	150	DX6-012-018040-154-K
1200	1800	0.22	21	40	0.8	20	220	DX6-012-021040-224-K
1200	1800	0.33	25	40	1	18	330	DX6-012-025040-334-K
1200	1800	0.47	21	60	1	18	282	DX6-012-021060-474-K
1200	1800	0.68	25	60	1	18	408	DX6-012-025060-684-K
1200	1800	1	30	60	1.2	16	600	DX6-012-030060-105-K
1200	1800	1.2	33	60	1.2	16	720	DX6-012-033060-125-K
1200	1800	1.5	37	60	1.2	16	900	DX6-012-037060-155-K
1200	1800	2	42	60	1.2	16	1200	DX6-012-042060-205-K
1200	1800	2.2	44	60	1.2	16	1320	DX6-012-044060-225-K

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1600VDC, RATED VOLTAGE								
VOLTAGE [V]		CAP <sup>(3)</sup>	DIMENSIONS [mm]			LEAD	CURRENT	ORDERING CODE
VDC	V-PEAK <sup>(1)</sup>	μF	D MAX.	L	d	AWG	I-PEAK <sup>(2)</sup> [A]	
1600	2400	0.033	11	40	0.8	20	44.6	DX6-016-011040-333-K
1600	2400	0.047	13	40	0.8	20	63.5	DX6-016-013040-473-K
1600	2400	0.068	15	40	0.8	20	91.8	DX6-016-015040-683-K
1600	2400	0.1	18	40	0.8	20	135	DX6-016-018040-104-K
1600	2400	0.15	21	40	0.8	20	203	DX6-016-021040-154-K
1600	2400	0.22	26	40	1	18	297	DX6-016-026040-224-K
1600	2400	0.33	22	60	1	18	264	DX6-016-022060-334-K
1600	2400	0.47	26	60	1	18	376	DX6-016-026060-474-K
1600	2400	0.68	31	60	1.2	16	544	DX6-016-031060-684-K
1600	2400	1	36	60	1.2	16	800	DX6-016-036060-105-K
1600	2400	1.2	39	60	1.2	16	960	DX6-016-039060-125-K
1600	2400	1.5	43	60	1.2	16	1200	DX6-016-043060-155-K

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2000VDC, RATED VOLTAGE								
VOLTAGE [V]		CAP <sup>(3)</sup>	DIMENSIONS [mm]			LEAD	CURRENT	ORDERING CODE
VDC	V-PEAK <sup>(1)</sup>	μF	D MAX.	L	d	AWG	I-PEAK <sup>(2)</sup> [A]	
2000	3000	0.01	11	40	0.8	20	16.8	DX6-020-011040-103-K
2000	3000	0.015	11	40	0.8	20	25.2	DX6-020-011040-153-K
2000	3000	0.022	12	40	0.8	20	37	DX6-020-012040-223-K
2000	3000	0.033	13	40	0.8	20	55	DX6-020-013040-333-K
2000	3000	0.047	14	40	0.8	20	79	DX6-020-014040-473-K
2000	3000	0.068	18	40	0.8	20	114	DX6-020-018040-683-K
2000	3000	0.1	22	40	1	20	168	DX6-020-022040-104-K
2000	3000	0.15	26	40	1	20	252	DX6-020-026040-154-K
2000	3000	0.22	32	40	1	20	220	DX6-020-032040-224-K
2000	3000	0.33	25	61	1.2	18	330	DX6-020-025061-334-K
2000	3000	0.47	29	61	1.2	18	470	DX6-020-029061-474-K
2000	3000	0.68	35	61	1.2	16	680	DX6-020-035061-684-K
2000	3000	1	41	61	1.2	16	1000	DX6-020-041061-105-K

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3000VDC, RATED VOLTAGE								
VOLTAGE [V]		CAP <sup>(3)</sup>	DIMENSIONS [mm]			LEAD	CURRENT	ORDERING CODE
VDC	V-PEAK <sup>(1)</sup>	μF	D MAX.	L	d	AWG	I-PEAK <sup>(2)</sup> [A]	
3000	4500	0.01	11	40	0.8	20	21	DX6-030-011040-103-K
3000	4500	0.015	12	40	0.8	20	31.5	DX6-030-012040-153-K
3000	4500	0.022	14	40	0.8	20	46.2	DX6-030-014040-223-K
3000	4500	0.033	17	40	0.8	20	69.3	DX6-030-017040-333-K
3000	4500	0.047	20	40	0.8	18	99	DX6-030-020040-473-K
3000	4500	0.068	25	40	1	18	143	DX6-030-025040-683-K
3000	4500	0.1	21	61	1	18	125	DX6-030-021061-104-K
3000	4500	0.15	25	61	1	18	188	DX6-030-025061-154-K
3000	4500	0.22	30	61	1.2	16	275	DX6-030-030061-224-K
3000	4500	0.33	37	61	1.2	16	413	DX6-030-037061-334-K
3000	4500	0.47	44	61	1.2	16	588	DX6-030-044061-474-K

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4000VDC, RATED VOLTAGE								
VOLTAGE [V]		CAP <sup>(3)</sup>	DIMENSIONS [mm]			LEAD	CURRENT	ORDERING CODE
VDC	V-PEAK <sup>(1)</sup>	μF	D MAX.	L	d	AWG	I-PEAK <sup>(2)</sup> [A]	
4000	6000	0.0047	11	40	0.8	20	12.2	DX6-040-011040-472-K
4000	6000	0.0068	13	40	0.8	20	17.7	DX6-040-013040-682-K
4000	6000	0.01	15	40	0.8	20	26	DX6-040-015040-103-K
4000	6000	0.015	20	40	0.8	20	39	DX6-040-020040-153-K
4000	6000	0.022	24	40	0.8	20	57	DX6-040-024040-223-K
4000	6000	0.033	17	61	1	18	51	DX6-040-017061-333-K
4000	6000	0.047	19	61	1	18	73	DX6-040-019061-473-K
4000	6000	0.068	23	61	1	18	105	DX6-040-023061-683-K
4000	6000	0.1	28	61	1.2	16	155	DX6-040-028061-104-K
4000	6000	0.15	33	61	1.2	16	233	DX6-040-033061-154-K
4000	6000	0.22	40	61	1.2	16	341	DX6-040-040061-224-K

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(3) MEASURED AT 1kHz ±20Hz AT 25°C

ALL INFORMATION ON THE FILE MAY CHANGE WITHOUT NOTICE

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UPDATE 2023-04-25

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6000VDC, RATED VOLTAGE								
VOLTAGE [V]		CAP <sup>(3)</sup>	DIMENSIONS [mm]			LEAD	CURRENT	ORDERING CODE
VDC	V-PEAK <sup>(1)</sup>	μF	D MAX.	L	d	AWG	I-PEAK <sup>(2)</sup> [A]	
6000	9000	0.0047	11	62	0.8	20	9.4	DX6-060-011062-472-K
6000	9000	0.0068	14	62	0.8	20	13.6	DX6-060-014062-682-K
6000	9000	0.01	16	62	0.8	20	20	DX6-060-016062-103-K
6000	9000	0.015	19	62	0.8	20	30	DX6-060-019062-153-K
6000	9000	0.022	22	62	0.8	20	44	DX6-060-022062-223-K
6000	9000	0.033	27	62	0.8	20	66	DX6-060-027062-333-K
6000	9000	0.047	31	62	1	18	94	DX6-060-031062-473-K
6000	9000	0.068	36	62	1	18	136	DX6-060-036062-683-K
6000	9000	0.1	42	62	1.2	16	200	DX6-060-042062-104-K
6000	9000	0.15	34	93	1.2	16	300	DX6-060-034093-154-K
6000	9000	0.22	41	93	1.2	16	215	DX6-060-041093-224-K

\*\*CUSTOM CAPACITANCE AND THREAD TERMINALS ARE AVAILABLE

(1) NON-REPETITIVE PEAK VOLTAGE LESS THAN 00ms TYP.

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10000VDC, RATED VOLTAGE								
VOLTAGE [V]		CAP <sup>(3)</sup>	DIMENSIONS [mm]			LEAD	CURRENT	ORDERING CODE
VDC	V-PEAK <sup>(1)</sup>	μF	D MAX.	L	d	AWG	I-PEAK <sup>(2)</sup> [A]	
10000	15000	0.001	11	62	0.8	20	2.8	DX6-100-011062-102-K
10000	15000	0.0022	13	62	0.8	20	6.2	DX6-100-013062-222-K
10000	15000	0.0033	14	62	0.8	20	9.2	DX6-100-014062-332-K
10000	15000	0.0047	16	62	0.8	20	13.2	DX6-100-016062-472-K
10000	15000	0.0068	19	62	0.8	20	19	DX6-100-019062-682-K
10000	15000	0.01	23	62	0.8	20	28	DX6-100-023062-103-K
10000	15000	0.015	27	62	0.8	20	42	DX6-100-027062-153-K
10000	15000	0.022	32	62	1	18	61.6	DX6-100-032062-223-K
10000	15000	0.033	40	62	1	18	92.4	DX6-100-040062-333-K
10000	15000	0.047	32	93	1	18	63.5	DX6-100-032093-473-K
10000	15000	0.068	37	93	1.2	16	92	DX6-100-037093-683-K
10000	15000	0.1	44	93	1.2	16	135	DX6-100-044093-104-K

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(3) MEASURED AT 1kHz ±20Hz AT 25°C

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UPDATE 2023-04-25