DER

Radial Leaded Super Capacitors



FEATURES High capacitance – Very fast charge/discharge cycling – RoHS compliant
Long life – Circuit board mountable – Compact size – Low ESR – High power density

APPLICATIONS Battery backup – Pulse power – Battery alternative – Audio systems
DC-DC converters – Mechanical actuators – LED displays – Hand held devices

Operating Temperature Range		-25°C to +70°C	
Storage Tolerance		-40°C to +70°C	
Capacitance Tolerance		1F to 500F, +50%/-20% @ 25°C 1200F to 3000F, 20%/-10% @25°C	
Surge Voltage	**WVDC**	2.5	
	SVDC	2.7	
Maximum Current		See standard part listing	1 second discharge to 1/2 WVDC
Operating Current		See standard part listing	5 second discharge to 1/2 WVDC
Leakage Current		See standard part listing	72 hours, 25˚C
Load Life		**1000 hours with rated voltage applied at 70˚C**	
		Capacitance change	<30% of initially measured values
		ESR	<400% of initially specified values
Life cycles (25°C) 1 cycle = Charge to WVDC for 20's, constant voltage charging for 10's, discharge to ½ WVDC for 20's, rest for 10's		**500,000 cycles**	
		Capacitance change	<30% of initially measured values
		ESR	<400% of initially specified values

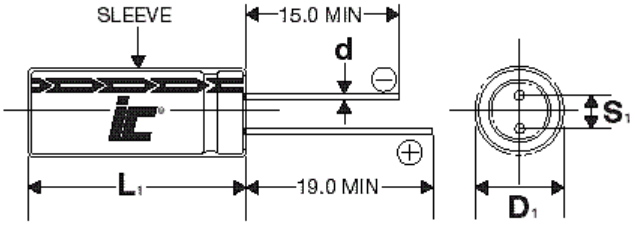
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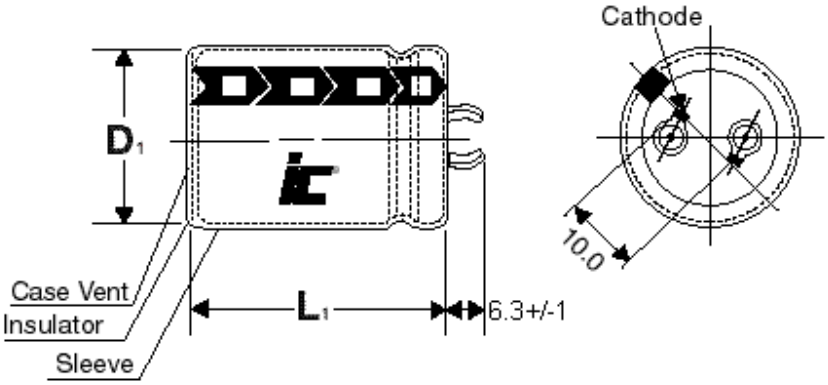
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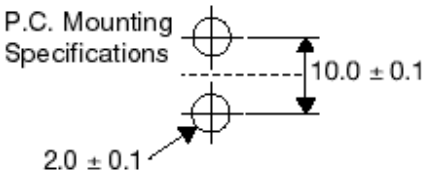
DER Super Capacitors



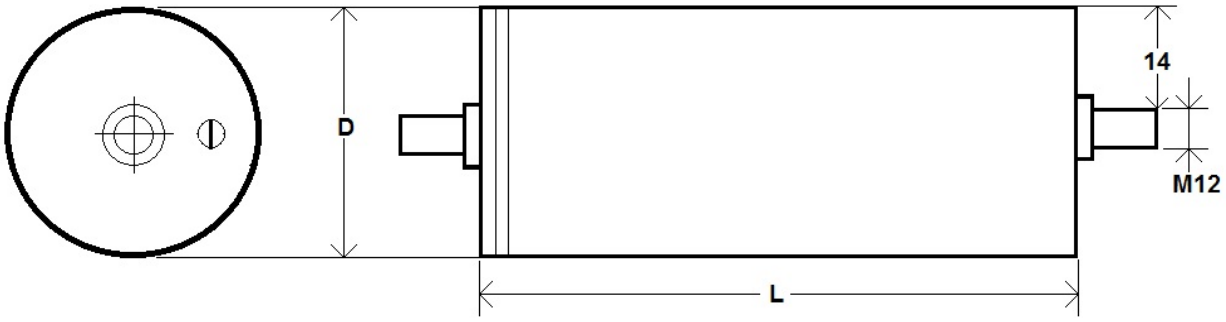
Lead spacing VS. Case diameter				
D	8	10	16	18
S	3.5	5.0	7.5	7.5
d	0.6	0.6	0.8	0.8

L_1=L+1.5mm
D_1=D+05mm
S_1=S±0.5mm





1200 to 3000F capacitors



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DER

Radial lead, +70°C

Capacitance (F)	WVDC	IC PART NUMBER	MAX Current (A)	ESR AC 1 kHz (mA)	Max stored energy (mWh)	LC (µA)	Specific Energy Gravimetric Density (mWh/kg)	Specific Energy Volumetric Density (mWh/l)	Specific Energy Gravimetric Density (mWh/kg)	Specific Energy Volumetric Density (mWh/l)	Weight (grams)	Volume (mL)	Dims DxL (mm)	Lead Spacing (mm)
1.0	2.5	105DER2R5SFN	1.3	500	0.0009	0.5	1.0117	1.4391	0.874	0.113	0.858	0.6032	8x12	3.5
2.0	2.5	205DER2R5SFQ	2.5	350	0.0017	1	1.6001	2.1587	1.257	0.274	1.085	1.085	8x16	3.5
3.0	2.5	305DER2R5SFU	3.8	200	0.0026	1.5	2.075	2.5904	1.868	0.589	1.255	1.0053	8x20	3.5
3.3	2.5	335DER2R5SGU	4.1	200	0.0029	1.7	1.3641	1.8237	1.116	0.92	2.1	1.5708	10x20	5
4.7	2.5	475DER2R5SGU	5.9	180	0.0035	2.5	1.6225	2.2105	1.209	1.016	2.14	1.5708	10x20	5
7.0	2.5	705DER2R5SGV	8.8	140	0.0061	3.5	2.3736	3.0947	1.332	1.673	2.56	1.9635	10x25	5
10.0	2.5	106DER2R5SGW	12.5	100	0.0087	5	2.7957	3.6841	1.61	2.945	3.105	2.3562	10x30	5
10.0	2.5	106DER2R5STV	12.5	100	0.0087	5	2.4887	2.8294	1.344	3.595	3.488	3.068	12.5x25	5
22.0	2.5	226DER2R5SKV	27.5	60	0.0191	11	2.6639	3.7993	1.046	9.425	7.169	5.0265	16x25	7.5
30.0	2.5	306DER2R5SKW	37.5	40	0.026	15	3.1486	4.3174	1.295	16.157	8.271	6.0319	16x30	7.5
50.0	2.5	506DER2R5SLZ	62.5	30	0.0434	25	3.4229	4.2641	1.183	38.17	12.68	10.179	18x40	7.5
100.0	2.5	107DER2R5SBG	125	25	0.0868	50	4.1613	5.0746	1.027	91.639	20.86	17.106	22x45	10
100.0	2.5	107DER2R5SLB	125	25	0.0868	50	4.4379	5.6854	1.096	81.794	19.56	15.268	18x60	7.5
150.0	2.5	157DER2R5SCP	188	22	0.1302	75	3.8523	5.3052	0.74	153.398	33.8	24.544	25x55	10
200.0	2.5	207DER2R5SDH	250	20	0.1736	100	4.4025	4.9122	0.762	265.072	39.39	35.343	30x50	10
250.0	2.5	257DER2R5SDP	313	18	0.217	125	4.4977	5.582	0.707	331.34	48.25	38.877	30x55	10
350.0	2.5	357DER2R5SEZ	438	12	0.3038	175	4.5818	5.2631	0.754	721.585	66.31	57.727	35x60	10

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