

DER

Radial Leaded Super Capacitors



APPLICATIONS

- Battery backup
- Battery alternative
- Audio systems
- LED Displays
- Pulse power
- DC-DC converters
- Mechanical actuators
- Hand Held Devices

FEATURES

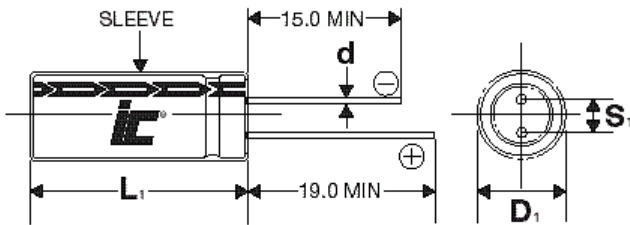
- High Capacitance
- Long Life
- Low ESR
- Very fast charge/discharge cycling
- Circuit board mountable
- High power density
- RoHS compliant
- Compact size

SPECIFICATIONS

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

Cap (F)	VDC	IC PART NUMBER	Max current (A)	Operating current (A)	ESR AC (mΩ, 1kHz)	ESR DC (mΩ)	Max stored energy (Wh)	LC (mA 72Hrs, 25°C)	Specific Energy Gravimetric DENSITY (Wh/kg)	Specific Energy Volumetric Density (Wh/l)	Specific power gravi Metric (kW/kg)	Specific Power volu Metric (kW/l)	Weight (grams)	Volume (mL)	Dims DxL (mm)
1	2.5	105DER2R5SFN	1.3	0.3	500	1000	0.0009	0.5	1.0117	1.4391	0.874	0.113	0.858	0.6032	8x12
2	2.5	205DER2R5SFQ	2.5	0.5	350	550	0.0017	1	1.6001	2.1587	1.257	0.274	1.085	0.8042	8x16
3	2.5	305DER2R5SFU	3.8	0.8	200	320	0.0026	1.5	2.075	2.5904	1.868	0.589	1.255	1.0053	8x20
3.3	2.5	335DER2R5SGU	4.1	0.8	200	320	0.0029	1.7	1.3641	1.8237	1.116	0.920	2.1	1.5708	10x20
4.7	2.5	475DER2R5SGU	5.9	1.2	180	290	0.0035	2.5	1.6225	2.2105	1.209	1.016	2.14	1.5708	10x20
7	2.5	705DER2R5SGV	8.8	1.8	140	220	0.0061	3.5	2.3736	3.0947	1.332	1.673	2.56	1.9635	10x25
10	2.5	106DER2R5SGW	12.5	2.5	100	150	0.0087	5	2.7957	3.6841	1.610	2.945	3.105	2.3562	10x30
10	2.5	106DER2R5STV	12.5	2.5	100	160	0.0087	5	2.4887	2.8294	1.344	3.595	3.488	3.068	12.5x25
22	2.5	226DER2R5SKV	27.5	5.5	60	100	0.0191	11	2.6639	3.7993	1.046	9.425	7.169	5.0265	16x25
30	2.5	306DER2R5SKW	37.5	7.5	40	70	0.0260	15	3.1486	4.3174	1.295	16.157	8.271	6.0319	16x30
50	2.5	506DER2R5SLZ	62.5	12.5	30	50	0.0434	25	3.4229	4.2641	1.183	38.170	12.68	10.179	18x40
100	2.5	107DER2R5SBG	125	25	25	35	0.0868	50	4.1613	5.0746	1.027	91.639	20.86	17.106	22x45
100	2.5	107DER2R5SLB	125	25	25	35	0.0868	50	4.4379	5.6854	1.096	81.794	19.56	15.268	18x60
150	2.5	157DER2R5SCP	188	37.5	22	30	0.1302	75	3.8523	5.3052	0.740	153.398	33.8	24.544	25x55
200	2.5	207DER2R5SDH	250	50	20	25	0.1736	100	4.4075	4.9122	0.762	265.072	39.39	35.343	30x50
250	2.5	257DER2R5SDP	313	62.5	18	22	0.2170	125	4.4977	5.582	0.707	331.340	48.25	38.877	30x55
350	2.5	357DER2R5SEZ	438	87.5	12	15	0.3038	175	4.5818	5.2631	0.754	721.585	66.31	57.727	35x60

Diameters ≤18 mm



D	8	10	16	18
S	3.5	5.0	7.5	7.5
d	0.6	0.6	0.8	0.8

$L_1 = L + 1.5\text{mm}$
 $D_1 = D + 0.5\text{mm}$
 $S_1 = S + 0.5\text{mm}$

Diameters ≥22 mm

