

## AREP Series Power

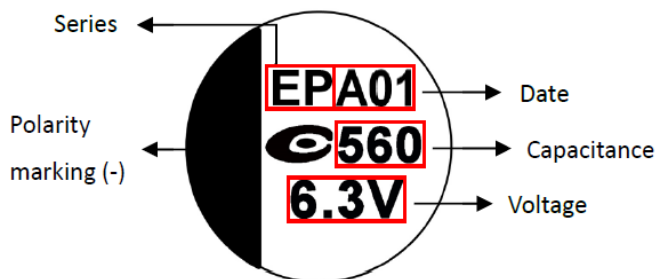
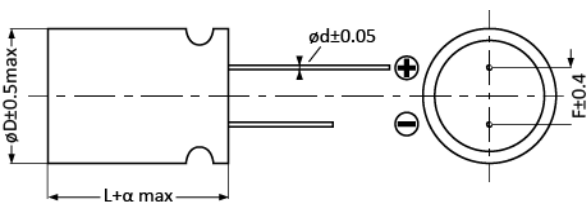
- Rated voltage: 6.3~35Vdc
- Endurance 3000hrs at 105°C
- Suitable for AC-DC DC-DC converters, voltage regulators and decoupling applications
- RoHS Compliant



### Specification

Category Temperature Range	-55 to 105°C	Rated Voltage Range	6.3 to 35Vdc
Rated Capacitance Range	100 to 2200 (μF)	Capacitance Tolerance	±20% (M)
Surge Voltage	Rated voltage X 1.15 (at 105°C)	Dissipation Factor	0.1 max. (at 20°C 120Hz)
Leakage Current	Shall not exceed values shown in standard ratings. (at 20°C after 2 mins.)		
Endurance	105°C, 3000hrs, rated voltage applied		
	Appearance	No significant damage	
	Capacitance Change	≤ ±20% of the initial value	
	DF(tanδ)	≤ 150% of the initial specified value	
	ESR	≤ 150% of the initial specified value	
	Leakage current	≤ The initial specified value	
Damp Heat (Steady State)	60°C, 90 to 95% RH, 1000hrs, voltage applied		
	Appearance	No significant damage	
	Capacitance Change	≤ ±20% of the initial value	
	DF(tanδ)	≤ 150% of the initial specified value	
	ESR	≤ 150% of the initial specified value	
	Leakage current	≤ The initial specified value	
Surge Voltage	2,000 cycles and each one includes charge with surge voltage specified at 105°C for 0.5min through a protective resistor (R=1kΩ) and discharge for 5.5min.		
	Appearance	No significant damage	
	Capacitance Change	≤ ±20% of the initial value	
	DF(tanδ)	≤ 150% of the initial specified value	
	ESR	≤ 150% of the initial specified value	
	Leakage current	≤ The initial specified value	

### Dimensions and Marking



SIZE Code	øD±0.5 max	L	α	ød ±0.05	F±0.4
05X7	5.0	7.0	-0.5~1.0	0.5	2.0
05X8	5.0	8.0	-0.5~1.0	0.5	2.0
06X5	6.3	5.0	-0.5~1.0	0.45	2.5
06X8	6.3	8.0	-0.5~1.0	0.6	2.5
06A0	6.3	10.0	-0.5~1.0	0.6	2.5
06A1	6.3	11.0	-0.5~1.0	0.6	2.5
08X8	8.0	8.0	-0.5~1.0	0.6	3.5
0811	8.0	11.0	-0.5~1.0	0.6	3.5
08A2	8.0	12.0	-0.5~1.0	0.6	3.5
08A6	8.0	16.0	-0.5~1.0	0.6	3.5
08B0	8.0	20.0	-0.5~1.0	0.6	3.5
10A0	10.0	10.0	-0.5~1.0	0.6	5.0
1010	10.0	10.0	-0.5~1.0	0.6	5.0
10A2	10.0	12.0	-0.5~1.0	0.6	5.0
10A6	10.0	16.0	-0.5~1.0	0.6	5.0
10B0	10.0	20.0	-0.5~1.0	0.6	5.0

AREP Series **Power**

Standard Ratings						
WV/Vdc (SV)	Cap (μF)	Size Code	Leakage Current (μA)	ESR (mΩmax/20°C, 100k to300kHz)	Rated Ripple Current (mArms/ 105°C /100kHz)	Part No.
6.3 (7.2)	220	06X5	277	15	3,160	6R3AREP221M06X5
	270	05X7	340	12	3,500	6R3AREP271M05X7
	330	05X8	500	8	4,050	6R3AREP331M05X8
	330	06X5	500	17	3,390	6R3AREP331M06X5
	330	06X8	500	8	4,700	6R3AREP331M06X8
	390	05X8	500	11	3,700	6R3AREP391M05X8
	470	05X8	592	8	4,050	6R3AREP471M05X8
	470	06X8	592	8	4,700	6R3AREP471M06X8
	560	06X8	705	8	4,700	6R3AREP561M06X8
	680	06X8	857	8	4,700	6R3AREP681M06X8
	820	06X8	1,033	8	4,700	6R3AREP821M06X8
	1,000	06A0	1,260	8	4,700	6R3AREP102M06A0
	1,000	08X8	1,260	7	6,100	6R3AREP102M08X8
	1,200	08A2	1,512	7	6,100	6R3AREP122M08A2
	1,500	08A2	1,890	7	6,100	6R3AREP152M08A2
	1,500	10A0	1,890	12	5,025	6R3AREP152M10A0
1,500	10A2	1,890	7	6,640	6R3AREP152M10A2	
6.8 (7.8)	270	05X7	367	12	3,500	6R8AREP271M05X7
	330	05X8	449	11	3,800	6R8AREP331M05X8
	470	05X8	639	8	3,200	6R8AREP471M05X8
	500	05X8	680	11	3,800	6R8AREP501M05X8
	820	06X8	1,115	8	5,500	6R8AREP821M06X8
	1,000	06A0	1,360	8	5,500	6R8AREP102M06A0
7.5 (8.6)	270	05X7	405	12	3,500	7R5AREP271M05X7
	390	05X8	585	11	3,800	7R5AREP391M05X8
	500	05X8	750	12	3,500	7R5AREP501M05X8
	560	06X8	705	8	4,700	7R5AREP561M06X8
	680	06X8	1,020	12	4,780	7R5AREP681M06X8
	820	06A1	1,230	10	5,200	7R5AREP821M06A1
10 (11.5)	220	06X8	440	10	4,500	100AREP221M06X8
	330	06X8	660	10	4,500	100AREP331M06X8
	470	06A0	940	10	4,700	100AREP471M06A0
	560	06A0	1,120	10	4,700	100AREP561M06A0
	680	08X8	1,360	12	4,700	100AREP681M08X8
	820	08A2	1,640	7	6,100	100AREP821M08A2
	1,000	08A2	2,000	8	6,100	100AREP102M08A2
	1,200	08A2	2,400	12	3,900	100AREP122M08A2

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WV/Vdc (SV)	Cap (µF)	Size Code	Leakage Current (µA)	ESR (mΩmax/20%, 100k to 300kHz)	Rated Ripple Current (mArms/ 105°C /100kHz)	Part No.
12 (13.8)	470	06A0	1,128	12	3,900	120AREP471M06A0
	560	06A0	1,344	12	3,900	120AREP561M06A0
16 (18.4)	100	05X8	320	18	2,690	160AREP101M05X8
	220	05X8	704	18	2,600	160AREP221M05X8
	220	06X8	704	15	3,200	160AREP221M06X8
	270	06X8	864	15	3,800	160AREP271M06X8
	330	06X8	1,056	20	2,800	160AREP331M06X8
	470	06A1	1,505	16	4,000	160AREP471M06A1
	470	08X8	1,505	16	4,000	160AREP471M08X8
	470	08A2	1,505	10	5,230	160AREP471M08A2
	470	1010	1,505	10	4,350	160AREP471M1010
	470	10A2	1,505	10	6,100	160AREP471M10A2
	560	06A1	1,792	20	3,500	160AREP561M06A1
	560	08A2	1,792	14	4,950	160AREP561M08A2
	680	08A2	2,176	10	5,230	160AREP681M08A2
	820	08A2	2,624	10	5,230	160AREP821M08A2
	1,000	08A6	3,200	10	6,100	160AREP102M08A6
	1,000	10A2	3,200	12	5,400	160AREP102M10A2
	1,200	10A2	3,840	10	6,100	160AREP122M10A2
	1,500	08A6	4,800	10	6,100	160AREP152M08A6
2,200	10B0	7,040	8	8,100	160AREP222M10B0	
20 (23)	330	06A0	1,320	16	3,460	200AREP331M06A0
	390	0811	1,560	14	4,970	200AREP391M0811
	470	08A2	1,880	14	4,970	200AREP471M08A2
	680	08A6	2,720	16	4,650	200AREP681M08A6
25 (28.8)	330	10A2	1,650	16	5,100	250AREP331M10A2
	470	08A2	2,350	16	4,650	250AREP471M08A2
	470	10A2	2,350	17	4,650	250AREP471M10A2
	560	08A6	2,800	14	5,000	250AREP561M08A6
	560	10A2	2,800	14	5,000	250AREP561M10A2
	680	08A6	3,400	14	5,000	250AREP681M08A6
	680	10A2	3,400	14	5,100	250AREP681M10A2
	820	08B0	4,100	13	5,100	250AREP821M08B0
	1,000	10A6	5,000	13	5,200	250AREP102M10A6
	1,500	10B0	7,500	13	5,300	250AREP152M10B0
35 (40.3)	100	06X8	700	35	2,350	350AREP101M06X8
	330	10A2	2,310	24	4,000	350AREP331M10A2
	470	08B0	3,290	20	4,400	350AREP471M08B0
	470	10A6	3,290	25	4,000	350AREP471M10A6
	560	10A6	3,920	23	4,200	350AREP561M10A6
	680	10B0	4,760	20	4,800	350AREP681M10B0