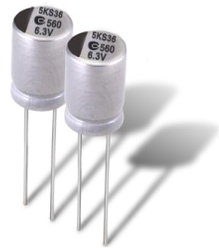
AR5K Series Long Life

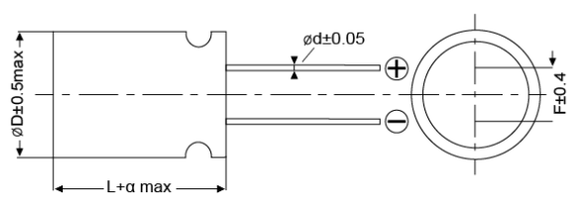


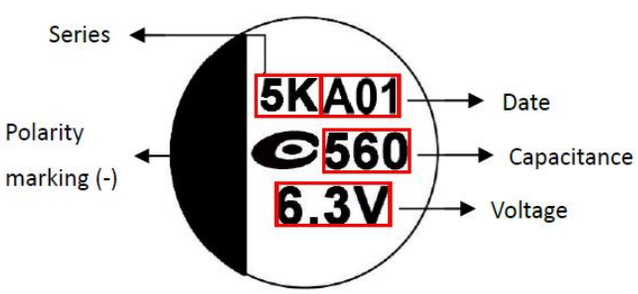
- Rated voltage: 2.5~16Vdc
- Endurance 5000hrs at 105℃
- Suitable for DC-DC converters, voltage regulators and decoupling applications
- RoHS Compliant

Specification

Category Temperature Range	-55 to 105℃	Rated Voltage Range	2.5 to 16Vdc
Rated Capacitance Range	10 to 1200 (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℃, 5000hrs, 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℃, 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	1,000 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
04X5	4.0	5.0	-0.5~1.0	0.45	1.5
05X8	5.0	8.0	-0.5~1.0	0.50	2.0
06X5	6.3	5.0	-0.5~1.0	0.45	2.5
06X8	6.3	8.0	-0.5~1.0	0.60	2.5
08X8	8.0	8.0	-0.5~1.0	0.60	3.5
08A2	8.0	12.0	-0.5~1.0	0.60	3.5
10A2	10.0	12.0	-0.5~1.0	0.60	5.0

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Standard Ratings

WV/Vdc (SV)	Cap (μF)	Size Code	Leakage Current (μA)	ESR (mΩmax/ 20°C, 100k to300kHz)	Rated Ripple Current (mArms/ 105℃/100kHz)	Part No.
2.5 (2.9)	390	05X8	500	7	4,180	2R5AR5K391M05X8C
	560	05X8	500	7	4,180	2R5AR5K561M05X8C
	560	06X8	500	7	5,000	2R5AR5K561M06X8C
	820	06X8	500	7	5,000	2R5AR5K821M06X8C
	820	08X8	500	7	6,100	2R5AR5K821M08X8C
	1,000	08X8	500	7	6,100	2R5AR5K102M08X8C
3 (3.4)	820	06X8	500	7	5,000	3R0AR5K821M06X8C
4 (4.6)	560	06X8	500	7	5,000	4R0AR5K561M06X8C
6.3 (7.2)	100	06X5	126	35	2,100	6R3AR5K101M06X5C
	470	06X8	592	8	4,700	6R3AR5K471M06X8C
	560	06X8	705	8	4,700	6R3AR5K561M06X8C
	560	08X8	705	8	5,700	6R3AR5K561M08X8C
	820	06X8	1,033	8	4,700	6R3AR5K821M06X8C
	820	08X8	1,033	8	5,700	6R3AR5K821M08X8C
10 (11.5)	10	04X5	300	80	700	100AR5K100M04X5C
16 (18.4)	100	06X5	320	24	2,490	160AR5K101M06X5C
	100	06X8	320	25	2,820	160AR5K101M06X8C
	270	06X8	864	10	5,000	160AR5K271M06X8C
	270	08X8	864	10	5,000	160AR5K271M08X8C
	270	08A2	864	10	5,230	160AR5K271M08A2C
	470	08X8	1,505	10	5,000	160AR5K471M08X8C
	470	08A2	1,505	10	5,230	160AR5K471M08A2C
	470	10A2	1,505	10	6,100	160AR5K471M10A2C
	680	08A2	2,176	10	5,230	160AR5K681M08A2C
	820	08A2	2,624	12	4,950	160AR5K821M08A2C
	1,000	10A2	3,200	12	5,400	160AR5K102M10A2C
	1,200	10A2	3,840	12	5,400	160AR5K122M10A2C