AV5K Series Long life



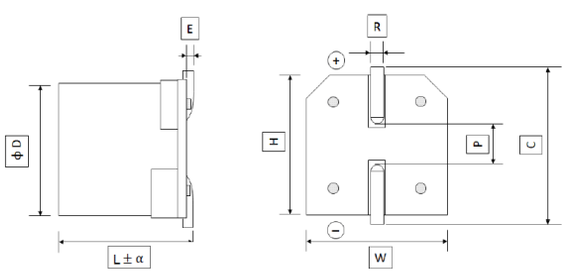
- Standard SMD type
- Rated Voltage: 2.5~25Vdc
- Endurance 5000hrs at 105℃
- Suitable for DC-DC converters, voltage regulators and decoupling applications
- RoHS Compliant

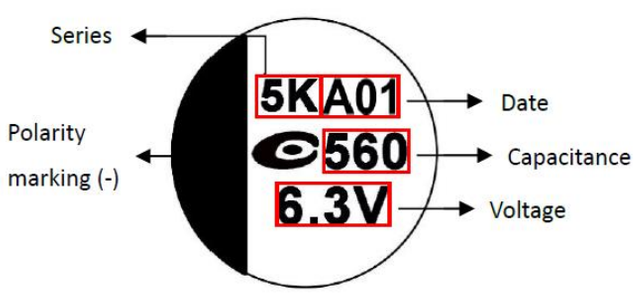
Specification

Category Temperature Range	-55 to 105°C	Rated Voltage Range	2.5 to 25Vdc
Rated Capacitance Range	22 to 1000 (μF)	Capacitance Tolerance	±20% (M)
Surge Voltage	Rated voltage X 1.15 (at 105°C)	Dissipation Factor	0.12 max. (at 20°C 120Hz)
Leakage Current	Shall not exceed values shown in standard ratings. (at 20°C after 2 mins.)		

Endurance	105°C, 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°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	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	ψD±0.5max (mm)	L (mm)	α (mm)	E (mm)	W±0.2 (mm)	H±0.2 (mm)	C±0.2 (mm)	R (mm)	P±0.3 (mm)
0506	5.0	5.8	±0.2	0.00~0.20	5.3	5.3	6.0	0.5~0.8	1.4
0606	6.3	5.8	±0.2	0.00~0.20	6.6	6.6	7.3	0.5~0.8	2.1
0645	6.3	4.3	-0.2~+0.1	0.00~0.20	6.6	6.6	7.3	0.5~0.8	2.1
0608	6.3	7.5	±0.5	0.00~0.20	6.6	6.6	7.3	0.5~0.8	2.1
0610	6.3	9.7	±0.3	0.00~0.20	6.6	6.6	7.3	0.6~0.9	2.1
0807	8.0	6.8	±0.2	0.00~0.20	8.3	8.3	9.0	0.8~1.1	2.9
0810	8.0	9.7	±0.3	0.00~0.20	8.3	8.3	9.0	0.8~1.1	2.9
0812	8.0	12.0	±0.5	0.00~0.20	8.3	8.3	9.0	0.8~1.1	3.2
1012	10.0	12.3	±0.2	0.00~0.20	10.3	10.3	11.0	0.8~1.1	4.6

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Standard Ratings

WV/Vdc (SV)	Cap (μF)	Size Code	Leakage Current (μA)	ESR (mΩmax/ 20°C, 100k to 300kHz)	Rated Ripple Current (mArms/ 105℃ /100kHz)	Part No.
2.5 (2.9)	330	0645	700	16	3,180	2R5AV5K331M0645C
	390	0606	489	10	3,900	2R5AV5K391M0606C
	560	0606	700	10	3,900	2R5AV5K561M0606C
	820	0608	700	7	5,000	2R5AV5K821M0608C
6.3 (7.2)	100	0645	315	19	2,300	6R3AV5K101M0645C
	150	0645	472	19	2,300	6R3AV5K151M0645C
	220	0606	277	15	3,160	6R3AV5K221M0606C
	220	0645	700	17	2,300	6R3AV5K221M0645C
	330	0606	416	17	3,390	6R3AV5K331M0606C
	330	0606	416	15	3,600	6R3AV5K331M0606CE15
	470	0807	592	10	4,300	6R3AV5K471M0807C
	560	0608	705	8	5,000	6R3AV5K561M0608C
	560	0610	705	10	4,300	6R3AV5K561M0610C
	560	0807	705	9	4,500	6R3AV5K561M0807C
16 (18.4)	100	0506	320	26	3,000	160AV5K101M0506C
	100	0606	320	24	2,490	160AV5K101M0606C
	100	0645	320	40	1,600	160AV5K101M0645C
	180	0606	576	21	3,300	160AV5K181M0606C
	220	0606	704	20	2,700	160AV5K221M0606C
	220	0807	704	22	3,300	160AV5K221M0807C
	270	0608	864	15	4,460	160AV5K271M0608C
	270	0610	864	16	3,500	160AV5K271M0610C
	270	0807	864	22	3,300	160AV5K271M0807C
	270	0810	864	16	4,400	160AV5K271M0810C
	470	0810	1504	12	4,700	160AV5K471M0810C
	560	0810	1792	18	3,900	160AV5K561M0810C
	560	0812	1792	14	4,950	160AV5K561M0812C
	1000	1012	3200	12	5,400	160AV5K102M1012C
25 （28.8）	22	0645	275	45	2,350	250AV5K220M0645C
	27	0606	338	40	2,100	250AV5K270M0606C
	47	0606	235	35	2,500	250AV5K470M0606C