ACAH Series

- Feature: Low ESR, Surface mounting, Reduced height, Wide temperature
- Suitable for DC-DC converters, voltage regulators and decoupling applications
- Rate voltage: 2~25Vdc.
- Endurance: Endurance 2000hrs at 105℃
- RoHS Compliant



Specifications

Item	Conditions	Characteristics	
Category Temperature Range		-55 to +105 ℃	
Rated Voltage Range		2 to 25 Vdc	
Capacitance Tolerance	at 20℃, 120Hz	±20 % (M)；Y：+10 ~ -35%	
Leakage Current	at 20℃ after 2 minutes	I ≦ 0.1CV (2 V.DC to 6.3 V.DC) I ≦ 0.2CV (4 V.DC) I ≦ 0.3CV (10 V.DC to 25 V.DC) I：Leakage Current(μA), C：Rated Capacitance(μF), V：Rated Voltage(V)	
Surge Voltage	15 to to 35℃	Rated voltage × 1.25 (2 V.DC to 16 V.DC) Rated voltage × 1.15 (20 V.DC to 25 V.DC)	
Dissipation Factor (tanδ)	at 20℃，120Hz	Case Height：S Type, 0.06 max.	
Endurance	105℃, rated voltage applied, 2000 hrs.	Appearance	No significant damage
		Capacitance Change	±20% of the initial value
		Dissipation Factor	≤ 200% of the initial specified value
		Leakage Current	2 V.DC to 6.3 V.DC ≤ 300% of the initial specified value 4 V.DC ≤ the initial specified value 10 V.DC to 25 V.DC ≤ within the initial limit
Damp Heat, Steady State	60℃, 90 to 95%RH, 500 hrs.	Appearance	No significant damage
		Capacitance Change	(2V.DC to 4 V.DC) +70%, -20% of the initial value (10V.DC to 25V.DC) +60%, -20% of the initial value (6.3V.DC) +50%, -20% of the initial value
		Dissipation Factor	≤ 200% of the initial specified value
		Leakage Current	2 V.DC to 6.3 V.DC within the initial specified value 10 V.DC to 25 V.DC ≤ 300% of the initial specified value
Surge Voltage	The capacitors shall be subjected to 1000 cycles each consisting of charge with the surge voltages, at 15℃ to 35℃ for 30 seconds through a protective resistor(R=1KΩ)and discharge for 5min 30 seconds.	Appearance	No significant damage
		Capacitance Change	±10% of the initial value
		Dissipation Factor	within the initial specified value
		Leakage Current	within the initial specified value

ACAH Series

Standard Ratings

WV(VDC)	Cap (μF)@120Hz	tanδ Max. @120Hz	Leakage Current Max. (μA)	ESR Max. (mΩ) @100kHz	Ripple Current (A r.m.s) @100kHz	Part No.
2	470	0.06	94	9	6.3	ACAH2R0S471E09
	470	0.06	94	9	6.3	ACAH2R0S471E09Y
	470	0.06	94	6	7.5	ACAH2R0S471E06
	470	0.06	94	4.5	8.5	ACAH2R0S471E04
	470	0.06	94	3	10.2	ACAH2R0S471E03
	560	0.06	112	6	7.5	ACAH2R0S561E06
	560	0.06	112	4.5	8.5	ACAH2R0S561E04
	560	0.06	112	3	10.2	ACAH2R0S561E03
2.5	330	0.06	82.5	4.5	8.5	ACAH2R5S331E04
	470	0.06	117.5	9	6.3	ACAH2R5S471E09
	470	0.06	117.5	9	6.3	ACAH2R5S471E09Y
	470	0.06	117.5	6	7.5	ACAH2R5S471E06
	470	0.06	117.5	4.5	8.5	ACAH2R5S471E04
	470	0.06	117.5	3	10.2	ACAH2R5S471E03
	560	0.06	140	6	7.5	ACAH2R5S561E06
	560	0.06	140	4.5	8.5	ACAH2R5S561E04
4	220	0.06	176	9	6.3	ACAH4R0S221E09
10	100	0.06	300	40	3.2	ACAH100S101E40
	100	0.06	300	40	3.2	ACAH100S101E40Y
16	47	0.06	225.6	40	3.2	ACAH160S470E40
	56	0.06	268.8	40	3.2	ACAH160S560E40
	100	0.06	480	40	3.2	ACAH160S101E40
20	33	0.06	198	40	3.2	ACAH200S330E40
25	33	0.06	247.5	40	3.2	ACAH250S330E40

Temperature Compensation Multipliers for Ripple Current			
	≦ 45°C	45°C ＜ T ≦ 85°C	85°C ＜ T ≦ 105°C
2 V.DC to 6.3 V.DC	1.0	0.7	0.25
10 V.DC to 25 V.DC	1.0	0.8	0.5

AP-CAP Aluminum Solid Electrolytic Capacitor

PRODUCT IDENTIFICATION

ACAH	2R5	S	561	E06	☐
Product	Rated Voltage 2R5: 2.5V	Case Height S:1.9mm	Capacitance 561=560μF	ESR E06： 6mΩ	Suffix for special code Y=+10~-35%

DIMENSIONS AND MARKING

Case size	L	WA	WB	H	P
S	7.3±0.3	4.3±0.3	2.4±0.2	1.9±0.3	1.3±0.2



