

ACAH Series

- Feature: Low ESR, Surface mounting, Reduced height, Wide temperature
- Suitable for DC-DC converters, voltage regulators and decoupling applications
- Rate voltage: 2~35Vdc.
- Endurance: Endurance 2000hrs at 105°C
- RoHS Compliant



Specifications

Item	Conditions	Characteristics	
Category Temperature Range		-55 to +105 °C	
Rated Voltage Range		2 to 35 Vdc	
Capacitance Tolerance	at 20°C, 120Hz	$\pm 20\% \text{ (M)}$; Y : $+10 \sim -35\%$	
Leakage Current	at 20°C after 2 minutes	$I \leq 0.1CV$ (2.5 V.DC to 6.3 V.DC) $I \leq 0.3CV$ (10 V.DC to 25 V.DC) I : Leakage Current(μ A), C : Rated Capacitance(μ F), V : Rated Voltage(V)	
Surge Voltage	15 to to 35°C	Rated voltage $\times 1.25$ (2.5 V.DC to 16 V.DC) Rated voltage $\times 1.15$ (20 V.DC to 25 V.DC)	
Dissipation Factor ($\tan\delta$)	at 20°C , 120Hz	Case Height : S Type, 0.06 max.	
Endurance	105°C, rated voltage applied, 2000 hrs.	Appearance	No significant damage
		Capacitance Change	$\pm 20\%$ of the initial value
		Dissipation Factor	$\leq 200\%$ of the initial specified value
		Leakage Current	2.5 V.DC to 6.3 V.DC $\leq 300\%$ of the initial specified value 10 V.DC to 25 V.DC \leq within the initial limit
Damp Heat, Steady State	60°C, 90 to 95%RH, 500 hrs.	Appearance	No significant damage
		Capacitance Change	(2.5 V.DC) +70%, -20% of the initial value (10 V.DC to 25 V.DC) +60%, -20% of the initial value
		Dissipation Factor	$\leq 200\%$ 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 $\leq 300\%$ 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°C to 35°C for 30 seconds through a protective resistor($R=1K\Omega$) and discharge for 5min 30 seconds.	Appearance	No significant damage
		Capacitance Change	$\pm 10\%$ of the initial value
		Dissipation Factor	within the initial specified value
		Leakage Current	within the initial specified value

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Standard Ratings

WV(VDC)	Cap (μ F)@120Hz	tan δ Max. @120Hz	Leakage Current Max. (μ A)	ESR Max. (m Ω) @100kHz	Ripple Current (A r.m.s) @100kHz	Part No.
2	560	0.06	112	3	10.2	ACAH2R0S561E03
2.5	560	0.06	140	6	7.5	ACAH2R5S561E06
	560	0.06	140	4.5	8.5	ACAH2R5S561E04
4	330	0.06	264	9	6.3	ACAH4R0S331E09
10	100	0.06	300	40	3.2	ACAH100S101E40
	100	0.06	300	40	3.2	ACAH100S101E40Y
35	22	0.06	231	40	3.2	ACAH350S220E40

Temperature Compensation Multipliers for Ripple Current

	$\leq 45^\circ\text{C}$	$45^\circ\text{C} < T \leq 85^\circ\text{C}$	$85^\circ\text{C} < T \leq 105^\circ\text{C}$
2 V.DC to 4 V.DC	1.0	0.7	0.25
16 V.DC to 35 V.DC	1.0	0.8	0.5

PRODUCT IDENTIFICATION

ACAH 2R5 S 561 E06
 Product Rated Voltage Case Height Capacitance ESR Suffix for special code
 2R5: 2.5V S:1.9mm 561=560 μ F E06: 6m Ω 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

