

ACAS Series

- Feature: Low ESR, Surface mounting, Reduced height, Wide temperature range
- Suitable for DC-DC converters, voltage regulators and decoupling applications
- Rate voltage: 6.3Vdc.
- Endurance: 2000hrs at 105°C
- RoHS Compliant



Specifications			
Item	Conditions	Characteristics	
Category Temperature Range		-55 to +105 °C	
Rated Voltage Range		6.3 Vdc	
Capacitance Tolerance	at 20°C, 120Hz	±20 % (M) ; Y : +10 ~ -35%	
Leakage Current	at 20°C after 2 minutes	$I \leq 0.1CV$ (2 V.DC to 6.3 V.DC) $I \leq 0.3CV$ (25 V.DC) I : Leakage Current(μA), C : Rated Capacitance(μF), V : Rated Voltage(V)	
Surge Voltage	15 to +35°C	Rated voltage × 1.25 (2 V.DC to 6.3 V.DC) Rated voltage × 1.15 (25 V.DC)	
Dissipation Factor (tanδ)	at 20°C , 120Hz	0.06 max.	
Endurance	105°C, 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 25 V.DC ≤ within the initial limit
Damp Heat, Steady State	60°C, 90 to 95%RH, 500 hrs.	Appearance	No significant damage
		Capacitance Change	(2 V.DC to 2.5 V.DC) +70%, -20% of the initial value (6.3V.DC) +50%, -20% of the initial value (25 V.DC) +60%, -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 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°C to 35°C 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

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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.
6.3	220	0.06	138.6	9	6.3	ACAS6R3S221E09
	220	0.06	138.6	15	5.1	ACAS6R3S221E15
16	68	0.06	326.4	40	3.2	ACAS160S680E40
	100	0.06	326.4	40	3.2	ACAS160S101E40

Temperature Compensation Multipliers for Ripple Current			
	≤ 45°C	45°C < T ≤ 85°C	85°C < T ≤ 105°C
6.3 V.DC	1.0	0.8	0.5

PRODUCT IDENTIFICATION

<u>ACAS</u>	<u>6R3</u>	<u>S</u>	<u>331</u>	<u>E09</u>	<input type="checkbox"/>
Product	Rated Voltage	Case Height	Capacitance	ESR	Suffix for special code
	6R3: 6.3V	S:1.9mm	331=330μF	E09: 9mΩ	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±0.2	1.3±0.2

