

ASUD Series

- Feature: Long life 、Miniaturization (D size)
- Endurance 2000hrs at 125°C
- Rate voltage: 16-25 Vdc.



Specifications			
Item	Conditions	Characteristics	
Category		-40~ +125°C	
Temperature Range			
Rated Voltage Range		16 to 25V.DC,	
Capacitance Tolerance	at 20°C, 120Hz	±20 %	
Leakage Current	at 20°C after 2 minutes	$I \leq 0.3CV$ (16 V.DC to 25 V.DC) I : Leakage Current(μA), C : Rated Capacitance(μF), V : Rated Voltage(V)	
Surge Voltage	15°C to 35°C	Rated voltage × 1.15 (16 V.DC to 25 V.DC)	
Dissipation Factor (tanδ)	at 20°C , 120Hz	0.10 max.	
Endurance	125°C, rated voltage applied,2000 hrs	Appearance	No significant damage
		Capacitance Change	±20% of initial value
		Dissipation Factor	≤ 200% of the initial specified value
		Leakage Current	≤ 300% of the initial specified value
Damp Heat, Steady State	60°C, 90 to 95%RH, 500 hrs.	Appearance	No significant damage
		Capacitance Change	(16 V.DC to 25 V.DC) +60%, -20% of the initial value
		Dissipation Factor	≤ 200% of the initial specified value
		Leakage Current	(16 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, 125% rated voltage, 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
Solderability	Pb-free solder Around 25% rosin melted ethanol or isopropylalcohol Temperature : 245 ± 5 °C Immersing time : 2 ± 0.5 s	More than 95% of outer terminal surface to be covered	
Resistance to Solvents	Solvent : isopropylalcohol Immersing time : 30 ± 5 s Room temperature	No significant damage and marking readable	
Shelf life	Test temperature:105±2°C Test time:500hrs.	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)	Case size (mm)			Specifications				Ripple Current* ¹ (mA r.m.s) @100kHz	Part No.
	L	W	H	Cap (μF)@120Hz	tanδ Max. @120Hz	ESR Max.* ² (mΩ) @100kHz	Leakage Current Max. (μA)		
16	7.3	4.3	1.9	100	0.1	40	480	3000	*ASUD160S101E40
	7.3	4.3	1.9	150	0.1	40	720	3000	*ASUD160S151E40
20	7.3	4.3	1.9	100	0.1	40	600	3000	ASUD200S101E40
	7.3	4.3	1.9	100	0.1	55	600	3000	ASUD200S101E55
25	7.3	4.3	1.9	47	0.1	40	352.5	3000	*ASUD250S470E40
	7.3	4.3	1.9	68	0.1	70	510	3000	*ASUD250S680E70
	7.3	4.3	1.9	100	0.1	60	750	3000	*ASUD250S101E60
	7.3	4.3	2.8	150	0.1	50	750	3000	*ASUD250H151E50

*Engineering

*1:Ripple Current:(100kHz / +45°C)

*2:ESR Max (100kHz / +20°C)

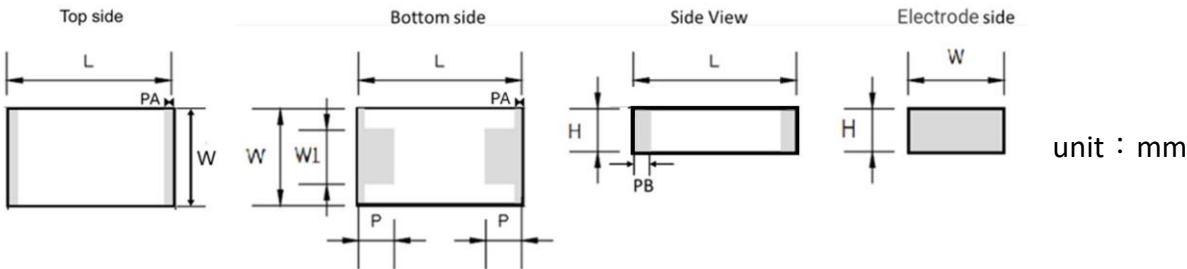
Temperature Compensation Multipliers for Ripple Current				
	≤ 45°C	45°C < T ≤ 85°C	85°C < T ≤ 105°C	125°C < T
16 V.DC to 25 V.DC	1.0	0.8	0.5	0.25

PRODUCT IDENTIFICATION

<u>ASUD</u>	<u>160</u>	<u>S</u>	<u>680</u>	<u>E40</u>
Product	Rated Voltage	Case Height	Capacitance	ESR
	160: 16V	S:1.9mm H:2.8mm	680=68μF	E40: 40mΩ

DIMENSIONS AND MARKING

Case size	L	W	H	P	W1	PA	PB
D	7.3±0.2	4.3±0.2	1.9±0.1	1.3±0.3	2.4±0.3	≤ 0.3	≤ 0.3
			2.8±0.3				



- ① : Polarity Bar (+)
- ② : Rated Voltage
- ③ : Rated Capacity
- ④ : Year (Q for 2025 、 R for 2026 、 S for 2027 、 T for 2028)
- ⑤ : Week
- ⑥ : Serial Code