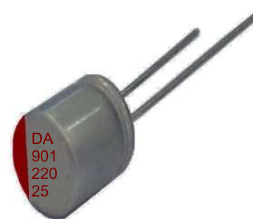


# DA series

- Endurance: +125°C 4,000 hours
- Low ESR, high voltage resistant
- RoHS Compliant

New

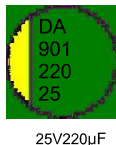
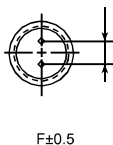
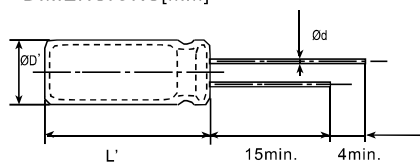


## SPECIFICATIONS

Items	Characteristics	
Category Temperature Range	-55~+125°C	
Rated Working Voltage Range	25~80 V <sub>dc</sub>	
Nominal Capacitance Range	15~470μF	
Capacitance Tolerance	±20%(M) (at 20°C, 120Hz)	
DC Leakage Current	LC=0.01CV or 3(μA), whichever is greater. (at 20°C after 2 minutes) Where, I:Max.leakage current (μA),C:Nominal capacitance (μF),V: Rated voltage (V)	
Dissipation Factor (tanδ)	Rated Voltage(V <sub>dc</sub> )	25    35    50    63    80 (at 20°C, 120Hz)
	tanδ (max.)	0.12
ESR(100kHz,20°C)	Value in standard ratings	
Temperature Characteristic (Impedance Ratio at 100kHz)	Z(+125°C)/Z(+20°C)≤1.5 Z(-55°C)/Z(+20°C)≤2.0	
Endurance	After applying rated voltage with rated ripple current for 4,000 hours at 125°C, the capacitors shall meet the following requirements	
	Appearance	No significant damage
	Capacitance Change	≤±30% of the initial value
	D.F. (tanδ)	≤200% of the initial specified value
	ESR	≤200% of the initial specified value
Leakage Current	≤The initial specified value	
High Temperature Storage (No-Load)	The requirements for the Endurance characteristics listed above shall be satisfied when the capacitors are restored to normal temperature after storing them for 2,000 hours under no-load at 125°C±2°C.	
Humidity Resistance (On-Load)	After applying rated voltage for 2,000 hours at 85°C±2°C and 85~90%RH, the capacitors shall meet the following requirements.	
	Appearance	No significant damage
	Capacitance Change	≤±30% of the initial value
	D.F. (tanδ)	≤200% of the initial specified value
	ESR	≤200% of the initial specified value
Leakage Current	≤The initial specified value	

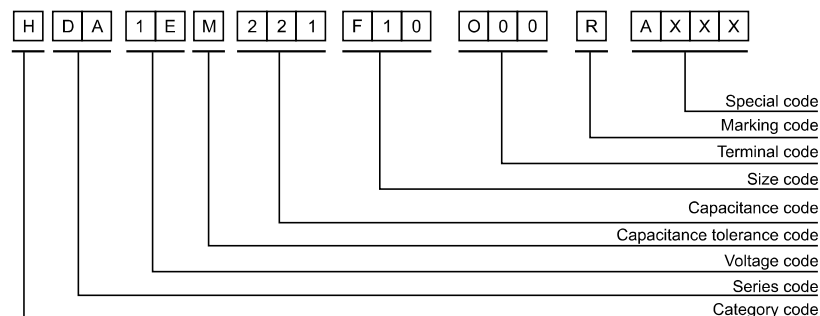
Conductive Polymer Hybrid Type

## DIMENSIONS[mm]



ØD	6.3	8	10
Ød	0.5	0.6	0.6
F	2.5	3.5	5.0
ØD'	ØD-0.1~+0.5max.		
L'	L +1.0max.	L -0.5~+1	

## PART NUMBERING SYSTEM



# DA series

■ STANDARD RATINGS

VDC (SV)	Cap (μF)	Size ΦDxL(mm)	ESR (mΩ, 20°C, 100kHz) (max.)	Rated ripple current (mA <sub>rms</sub> /125°C, 100kHz)	Leakage Current (μA)(max.)	Part Number
25 (28.8)	100	6.3×7	35	1200	25	HDA1EM101E07O00RAXXX
	220	8×10	27	1400	55	HDA1EM221F10O00RAXXX
	330	10×10	25	1800	82.5	HDA1EM331G10O00RAXXX
	470	10×10	20	2000	117.5	HDA1EM471G10O00RAXXX
35 (40.3)	47	6.3×7	40	1100	16.5	HDA1VM470E07O00RAXXX
	68	6.3×8	40	1200	23.8	HDA1VM680E08O00RAXXX
	120	8×10	35	1400	42	HDA1VM121F10O00RAXXX
	220	10×10	30	1800	77	HDA1VM221G10O00RAXXX
50 (57.5)	22	6.3×8	90	900	11	HDA1HM220E08O00RAXXX
	47	8×10	35	1100	23.5	HDA1HM470F10O00RAXXX
	100	10×10	35	1400	50	HDA1HM101G10O00RAXXX
63 (72.5)	15	6.3×8	100	800	9.5	HDA1JM150E08O00RAXXX
	33	8×10	50	1000	20.8	HDA1JM330F10O00RAXXX
	56	10×10	40	1200	35.3	HDA1JM560G10O00RAXXX
80 (92.0)	47	8×12	40	1000	37.6	HDA1BM470F12O00RAXXX

■ Frequency Coefficient of Rated Ripple Current

Frequency(Hz)	120	1k	10k	100k≤
Coefficient	0.05	0.30	0.70	1.00