

Hybrid Conductive Polymer Type / Surface Mount Type

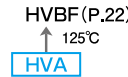
RoHS compliance

# HVA Series

Super Low ESR



- 105°C, 3,000 to 5,000hours
- Solvent proof (within 2 minutes)



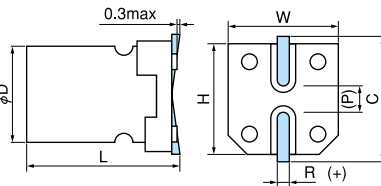
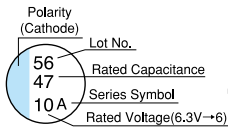
Aluminum Electrolytic Capacitors with Hybrid Conductive Polymer

## Specifications

Items	Condition	Specifications		
Rated voltage (V)	—	6.3	10	16
Surge voltage (V)	Room temperature	8.2	13	20
Category temperature range (°C)	—	-55 to +105		
Capacitance tolerance (%)	120Hz/20°C	M : ±20		
Dissipation Factor (tan δ)	tan δ (max) 120Hz/20°C	0.18	0.16	0.14
Leakage current (LC) ★	μA/after 2minutes (max)	The greater value of either 0.2CV or 100		
Endurance	105°C rated voltage applied (With the rated ripple current)	Test	φ6.3 : 3,000hours. D≥φ8 : 5,000hours	
		ΔC/C	Within ±30% of the initial value	
		tan δ	Less than 200% of the specified value	
		ESR	Less than 200% of the specified value	
		LC	Less than the specified value	

★Please apply the rated voltage for 120 seconds at 105°C in case the measured value is bigger than the specified value.

## Marking, Dimensions



A pressure relief vent is provided for φD=8 or bigger (P)reference size

(Unit : mm)

D <sup>+0.5max</sup>	L <sup>±0.3</sup>	W <sup>±0.2</sup>	H <sup>±0.2</sup>	C <sup>±0.2</sup>	R	P
6.3	6.0	6.6	6.6	7.3	0.5 to 0.8	2.2
6.3	7.7	6.6	6.6	7.3	0.5 to 0.8	2.2
8	10.5	8.3	8.3	9.0	0.7 to 1.0	3.2
10	10.5	10.3	10.3	11.0	1.0 to 1.4	4.6

## Size, ESR, Rated Ripple Current

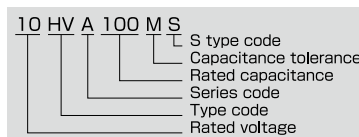
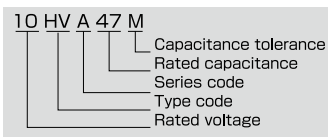
μF \ V	6.3			10			16		
10							6.3×6.0	54	1130
22							6.3×6.0	54	1130
33				6.3×6.0	40	1510	6.3×6.0	54	1130
47				6.3×6.0	40	1510	6.3×7.7 ★	45	1480
68				6.3×6.0	40	1510	8×10.5	22	2290
100				6.3×7.7 ★	35	1910	8×10.5	22	2290
150				8×10.5	18	2800	8×10.5	22	2290
220	6.3×6.0	36	1630	6.3×7.7 ★	35	1910	10×10.5	20	2920
330	6.3×7.7 ★	32	2020	8×10.5	18	2800			
390	8×10.5	16	3150	8×10.5	18	2800			
470	8×10.5	16	3150	8×10.5	18	2800			
560	8×10.5	16	3150	10×10.5	16	3650			
680	8×10.5	16	3150	10×10.5	16	3650			
820	10×10.5	15	3890						
1000	10×10.5	15	3890						

Please refer to page 20 for ripple current frequency coefficients.

★S type

Rated ripple current  
mA rms (100kHz, 105°C)  
ESR (mΩ)  
max at 100kHz, 20°C  
Case size: φD×L (mm)

## Part number



Basic Construction Features Characteristics

Advantages of EP-cap

Soldering Condition  
Reflow Soldering Condition  
Ripple Current Frequency Coefficient

HVA

HVBF

HVH

HVP

HVT

HVHZ

HVPZ

HVHF

HVPF

HEH

HEHZ

HEPZ