

## OVK Series

### Features

- 105°C, 5,000 hours assured
- Ultra low ESR, solid capacitors of SMD type
- RoHS Compliance



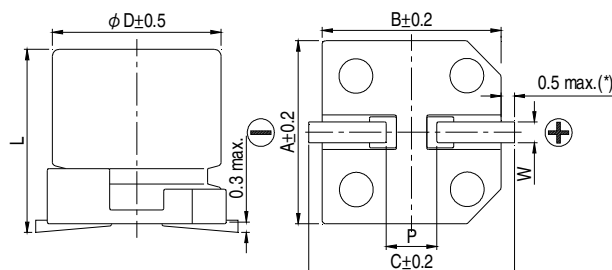
Marking color: Blue

### Specifications

Items	Performance				
Category Temperature Range	-55℃ ~ +105℃				
Capacitance Tolerance	±20% (at 120Hz, 20℃)				
Leakage Current (at 20℃)*	Rated voltage applied, after 2 minutes at 20℃. See Standard Ratings				
Tanδ (at 120Hz, 20℃)	See Standard Ratings				
ESR (at 100k ~ 300k Hz, 20℃)	See Standard Ratings				
Endurance	Test Time		5,000 Hrs		
	Capacitance Change		Within ±20% of initial value		
	Tanδ		Less than 150% of specified value		
	ESR		Less than 150% of specified value		
	Leakage Current		Within specified value		
	* The above specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage applied for 5,000 hours at 105℃.				
Moisture Resistance	Test Time		1,000 Hrs		
	Capacitance Change		Within ±20% of initial value		
	Tanδ		Less than 150% of specified value		
	ESR		Less than 150% of specified value		
	Leakage Current		Within specified value		
	* The above specifications shall be satisfied when the capacitors are restored to 20℃ after subjecting them at 60℃, 90 to 95% RH for 1,000 hours. Leakage current should be tested after voltage treatment*.				
Resistance to Soldering Heat * (Please refer to page 25 for reflow soldering conditions)	Capacitance Change		Within ±10% of initial value		
	Tanδ		Within specified value		
	ESR		Within specified value		
	Leakage Current		Within specified value		
Ripple Current and Frequency Multipliers	Frequency (Hz)	120 ≤ f < 1k	1k ≤ f < 10k	10k ≤ f < 100k	100k ≤ f < 500k
	Multiplier	0.05	0.3	0.7	1.0

\* For any doubt about measured values, measure the leakage current again after the following voltage treatment.  
Voltage treatment: DC rated voltage is applied to the capacitors for 2 hours at 105 °C.

### Diagram of Dimensions



### Lead Spacing and Diameter

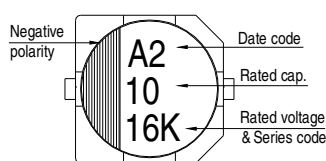
Unit: mm

φ D	L	A	B	C	W	P ± 0.2
6.3	5.9 +0.1/-0.3	6.6	6.6	7.2	0.5 ~ 0.8	2.0
6.3	9.5 ± 0.5	6.6	6.6	7.2	0.5 ~ 0.8	2.0
8	6.7 ± 0.3	8.3	8.3	9.0	0.7 ~ 1.1	3.1
8	12.0 ± 0.5	8.3	8.3	9.0	0.7 ~ 1.1	3.1
10	7.7 ± 0.3	10.3	10.3	11.0	0.7 ~ 1.3	4.7
10	12.6 +0.1/-0.4	10.3	10.3	11.0	0.7 ~ 1.3	4.7

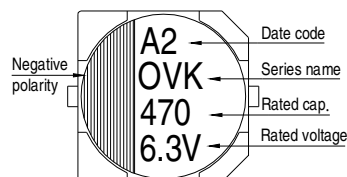
(\*): For 6.3φ is 0.4 max.

### Marking

φ D = 6.3



φ D = 8 ~ 10



Dimension:  $\phi$  D×L(mm)

Ripple Current: mA/rms at 100k Hz, 105°C

## Standard Ratings

Rated Volt. (V)	Surge Voltage (V)	Capacitance ( $\mu$ F)	Size $\phi$ D×L(mm)	Tan $\delta$ (120Hz, 20°C)	LC ( $\mu$ A)	ESR (m $\Omega$ /at 100k ~ 300k Hz, 20°C max.)	Rated R. C. (mA/rms at 100k Hz, 105°C)
4V (0G)	4.6	150	6.3 × 5.9	0.12	120	22	2,570
		270	8 × 6.7	0.12	216	22	3,220
		330	6.3 × 5.9	0.12	264	20	2,800
			8 × 6.7	0.12	264	22	3,220
		560	8 × 6.7	0.12	448	18	3,600
		680	10 × 7.7	0.12	544	20	4,130
6.3V (0J)	7.2	100	6.3 × 5.9	0.12	126	22	2,800
		120	6.3 × 5.9	0.12	151	22	2,800
		220	6.3 × 5.9	0.12	277	20	2,800
			8 × 6.7	0.12	277	22	3,220
		390	8 × 6.7	0.12	491	22	3,220
		470	10 × 7.7	0.12	592	20	4,130
10V (1A)	12.0	56	6.3 × 5.9	0.12	112	27	2,300
		68	6.3 × 5.9	0.12	136	27	2,300
		120	6.3 × 5.9	0.12	240	27	2,300
		150	8 × 6.7	0.12	300	30	2,760
			10 × 7.7	0.12	300	30	3,020
		270	8 × 6.7	0.12	540	22	3,200
		330	10 × 7.7	0.12	660	24	3,770
16V (1C)	18.0	39	6.3 × 5.9	0.12	125	30	2,200
		68	6.3 × 5.9	0.12	218	30	2,200
		82	8 × 6.7	0.12	262	28	2,800
		100	10 × 7.7	0.12	320	35	2,670
		120	8 × 6.7	0.12	384	28	2,800
		180	10 × 7.7	0.12	576	29	3,430
		270	6.3 × 9.5	0.12	864	11	5,000
		820	10 × 12.6	0.12	2,624	12	5,400
20V(1D)	23.0	56	6.3 × 5.9	0.12	224	48	1,300
		270	8 × 12	0.12	1,080	21	4,000
		390	8 × 12	0.12	1,560	14	4,950
		470	10 × 12.6	0.12	1,880	20	4,300
25V(1E)	29.0	47	6.3 × 5.9	0.12	235	49	1,300
		150	8 × 12	0.12	750	28	2,200
		270	10 × 12.6	0.12	1,350	27	2,700
35V(1V)	40.0	18	6.3 × 5.9	0.12	126	64	900
		82	8 × 12	0.12	574	29	2,200
		150	10 × 12.6	0.12	1,050	28	2,600

Note: The surface temperature of aluminum case top must not exceed 105°C. A rise in temperature due to self-heating by ripple current should be factored in.

## Part Numbering System

OVK Series	470 $\mu$ F	±20%	6.3V	Carrier Tape		10 $\phi$ × 7.7L	Pb-free and PET coating case
<b>OVK</b>	<b>471</b>	<b>M</b>	<b>0J</b>	<b>TR</b>	-	<b>1008</b>	
Series Name	Capacitance	Capacitance Tolerance	Rated Voltage	Package Type	Terminal Type	Case size	Lead Wire and Coating Type

Note: For more details, please refer to "Part Numbering System (SMD Type)" on page 15.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Lelon:

[OVK101M0JTR-0606](#) [OVK101M1CTR-1008](#) [OVK121M0JTR-0606](#) [OVK121M1ATR-0606](#) [OVK121M1CTR-0807](#)  
[OVK151M0GTR-0606](#) [OVK151M1ATR-0807](#) [OVK151M1ATR-1008](#) [OVK181M1CTR-1008](#) [OVK221M0JTR-0606](#)  
[OVK221M0JTR-0807](#) [OVK271M0GTR-0807](#) [OVK271M1ATR-0807](#) [OVK331M0GTR-0606](#) [OVK331M0GTR-0807](#)  
[OVK331M1ATR-1008](#) [OVK390M1CTR-0606](#) [OVK391M0JTR-0807](#) [OVK471M0JTR-1008](#) [OVK560M1ATR-0606](#)  
[OVK561M0GTR-0807](#) [OVK680M1ATR-0606](#) [OVK680M1CTR-0606](#) [OVK681M0GTR-1008](#) [OVK820M1CTR-0807](#)  
[OVK271M1CTR-0807](#) [OVK470M1ETR-0606](#) [OVK102M1CTR-1013](#) [OVK471M1DTR-1013](#) [OVK561M1CTR-0812](#)  
[OVK331M0JTR-0608](#) [OVK331M0JTR-0606](#) [OVK101M1VTR-0810](#) [OVK821M1CTR-1013](#) [OVK221M1CTR-0807](#)  
[OVK101M1ETR-0807](#)