

**USK** SERIES

**UPGRADE**

85°C Ultra Miniaturized

• Load Life : 85°C 3000 hours.

RoHS compliance



◆ SPECIFICATIONS

Items	Characteristics												
Category Temperature Range	-25~+85°C												
Rated Voltage Range	400~500Vdc												
Capacitance Tolerance	±20% (20°C, 120Hz)												
Leakage Current(MAX)	$I=3\sqrt{CV}$ (After 5 minutes application of rated voltage) $I$ =Leakage Current( $\mu$ A) $C$ =Capacitance( $\mu$ F) $V$ =Rated Voltage(Vdc)												
Dissipation Factor(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (Vdc)</th> <th>Leakage Current (<math>\mu</math>A)</th> <th>C = Capacitance (<math>\mu</math>F)</th> <th>V = Rated Voltage (Vdc)</th> </tr> </thead> <tbody> <tr> <td>400~450</td> <td>475, 500</td> <td>(20°C, 120Hz)</td> <td></td> </tr> <tr> <td colspan="2">tan<math>\delta</math></td> <td>0.20</td> <td>0.25</td> </tr> </tbody> </table>	Rated Voltage (Vdc)	Leakage Current ( $\mu$ A)	C = Capacitance ( $\mu$ F)	V = Rated Voltage (Vdc)	400~450	475, 500	(20°C, 120Hz)		tan $\delta$		0.20	0.25
Rated Voltage (Vdc)	Leakage Current ( $\mu$ A)	C = Capacitance ( $\mu$ F)	V = Rated Voltage (Vdc)										
400~450	475, 500	(20°C, 120Hz)											
tan $\delta$		0.20	0.25										
Endurance	After applying rated voltage with rated ripple current for 3000 hours at 85°C, the capacitors shall meet the following requirements. <table border="1"> <tbody> <tr> <td>Capacitance Change</td> <td>Within ±20% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </tbody> </table>	Capacitance Change	Within ±20% of the initial value.	Dissipation Factor	Not more than 200% of the specified value.	Leakage Current	Not more than the specified value.						
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Leakage Current	Not more than the specified value.												
Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage (Vdc)</th> <th>400~450</th> <th>475, 500</th> <th>(120Hz)</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>8</td> <td>12</td> <td></td> </tr> </tbody> </table>	Rated Voltage (Vdc)	400~450	475, 500	(120Hz)	Z(-25°C)/Z(20°C)	8	12					
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Z(-25°C)/Z(20°C)	8	12											

◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency (Hz)	60(50)	120(100)	300	500	1k	10k $\leq$
Coefficient	0.80	1.00	1.15	1.20	1.25	1.40

◆ OPTION

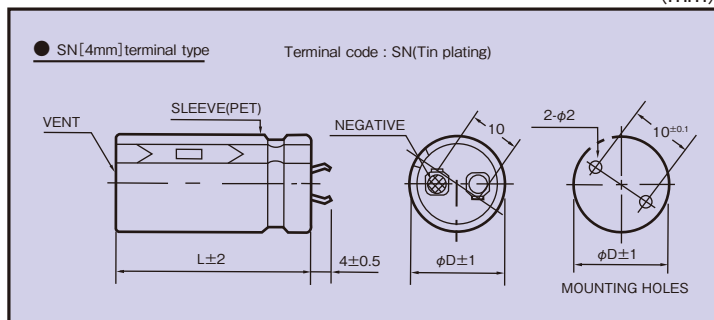
	Code
PET Sleeve without plate	EFC

◆ PART NUMBER

USK   
     M   
    SN   
 DXL  
 Rated Voltage    Series    Capacitance    Capacitance Tolerance    Option    Terminal Code    Case Size

◆ DIMENSIONS

(mm)



◆ **STANDARD SIZE**

Cap(μF) \ Vdc φD	400						420									
	φ22		φ25		φ30		φ35		φ22		φ25		φ30		φ35	
150	22×25	1.40							22×25	1.42						
180	22×25	1.47							22×30	1.63	25×25	1.59				
	22×30	1.60														
220	22×30	1.74	25×25	1.68					22×30	1.72	25×25	1.67				
								22×35					1.87	25×30	1.84	
270	22×35	1.99	25×30	1.95						22×35	1.97	25×30				1.98
330	22×40	2.26	25×35	2.23	30×25	1.98			22×45	2.41	25×35	2.27	30×25	1.98		
														30×30	2.22	
390	22×45	2.51	25×35	2.34	30×30	2.30			22×50	2.67	25×40	2.54	30×30	2.31	35×25	2.10
	22×50	2.64	25×40	2.50												
470	22×55	2.92	25×40	2.63	30×30	2.39	35×25	2.12	22×55	2.89	25×45	2.82	30×35	2.63	35×30	2.47
	22×60	3.03	25×45	2.81	30×35	2.61		25×50			2.97					
560	22×60	3.17	25×50	3.12	30×35	2.75	35×30	2.50			25×50	3.08	30×40	2.95	35×30	2.54
			25×55	3.24	30×40	2.92			25×55	3.28	35×35	2.81				
680			25×55	3.41	30×40	3.05	35×35	2.83			25×60	3.55	30×45	3.29	35×35	2.90
			25×60	3.58	30×45	3.25			30×50	3.47	35×40	3.15				
820					30×50	3.57	35×40	3.17					30×50	3.64	35×40	3.25
													30×55	3.80	35×45	3.47
1000					30×60	4.12	35×45	3.62					30×60	4.13	35×45	3.57
							35×50	3.79							35×50	3.78
1200							35×55	4.09							35×55	4.15
															35×60	4.36

Cap(μF) \ Vdc φD	450						475									
	φ22		φ25		φ30		φ35		φ22		φ25		φ30		φ35	
100									22×25	1.11						
120	22×25	1.30							22×30	1.28						
150	22×25	1.41							22×35	1.48	25×25	1.38				
	22×30	1.53														
180	22×30	1.65	25×25	1.60					22×35	1.60	25×30	1.59				
220	22×35	1.89	25×30	1.85					22×45	1.89	25×35	1.82	30×25	1.70		
270	22×40	2.15	25×35	2.12	30×25	1.90			22×50	2.14	25×40	2.07	30×30	1.97	35×25	1.87
330	22×45	2.37	25×35	2.23	30×30	2.22	35×25	2.04	22×60	2.46	25×45	2.33	30×35	2.25	35×30	2.18
	22×50	2.51	25×40	2.41												
390	22×55	2.75	25×40	2.50	30×30	2.29	35×25	2.11			25×55	2.68	30×40	2.51	35×30	2.27
	22×60	2.86	25×45	2.67	30×35	2.51	35×30	2.39								
470	22×60	3.01	25×50	2.96	30×35	2.63	35×30	2.43			25×60	2.95	30×45	2.81	35×35	2.58
			25×55	3.09	30×40	2.82										
560			25×55	3.23	30×40	2.95	35×35	2.78					30×50	3.10	35×40	2.89
			25×60	3.40	30×45	3.13										
680					30×45	3.25	35×40	3.10					30×60	3.56	35×50	3.40
					30×50	3.46										
820					30×55	3.77	35×45	3.43							35×55	3.72
					30×60	3.97										
1000							35×50	3.79								
							35×55	4.01								
1200							35×60	4.40								

Cap(μF) \ Vdc φD	500							
	φ22		φ25		φ30		φ35	
100	22×25	1.12						
120	22×30	1.28	25×25	1.27				
150	22×35	1.49	25×30	1.48				
180	22×40	1.68	25×30	1.60				
220	22×45	1.91	25×40	1.93	30×25	1.70		
270	22×55	2.23	25×45	2.18	30×35	2.12	35×25	1.87
330			25×50	2.45	30×40	2.39	35×30	2.18
390			25×60	2.79	30×40	2.52	35×35	2.47
470					30×50	2.95	35×40	2.78
560					30×55	3.25	35×45	3.08
680							35×50	3.40
820							35×60	3.89

↑ Ripple Current (A r.m.s./120Hz, 85°C)  
 ↑ Case Size φD×L(mm)