

PH Series

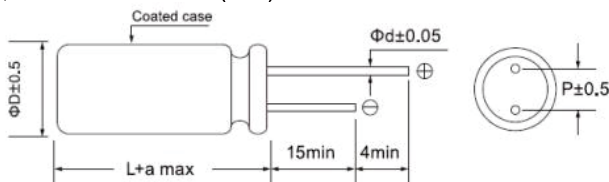
- Recommended Applications: Long life and Ultra low ESR Series
- Load life 5,000 hours at 105°C
- RoHS Compliant



◆ SPECIFICATIONS

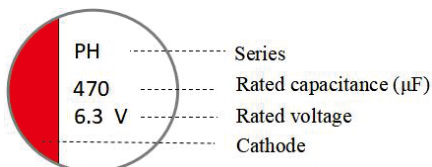
Item	Performance Characteristics								
Category Temperature Range	-55 ~ +105℃								
Working Voltage Range	2.5 ~ 25Vdc								
Capacitance Range	100 ~1,500 μF								
Capacitance Tolerance	±20% (at 20℃ and 120Hz)								
Dissipation Factor (tanδ) (at 20℃, 120Hz)	<table><tr><td>Rated Voltage (V)</td><td>2.5~10</td><td>16~25</td></tr><tr><td>Tanδ(Max)</td><td>0.12</td><td>0.12</td></tr></table>			Rated Voltage (V)	2.5~10	16~25	Tanδ(Max)	0.12	0.12
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Tanδ(Max)	0.12	0.12							
Leakage Current	I=0.2CV or 300 μA, whichever is greater I : Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V) Impress the rated voltage for 2 minutes								
Low Temperature Characteristics Impedance Ratio(MAX)	Z(-25℃) / Z(+25℃) ≤1.15 at 100KHz Z(-55℃) / Z(+25℃) ≤1.25 at 100KHz								
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for 5,000 hours at 105℃.								
	Capacitance change	≒ ±20% of the initial value							
	Dissipation factor(tanδ)	≒ 150% of the specified value							
	Equivalent Series Resistance	≒ 150% of the specified value							
	Leakage current	≒ specified value							
Moisture Resistance	The following requirements shall be satisfied when the capacitor are restored to 20℃ after exposing them for 1,000 hours at 60℃ 90 to 95% RH.								
	Capacitance change	≒ ±20% of the initial value							
	Dissipation factor(tanδ)	≒ 150% of the specified value							
	Equivalent Series Resistance	≒ 150% of the specified value							
	Leakage current	≒ specified value							

◆ DIMENSIONS (mm)



Size	D	L	a	Φd	P
0509	5	9	1.0	0.5	2.0
5R09	5.5	9	1.0	0.5	2.5
0605	6.3	5	1.0	0.45	2.5
0608	6.3	8	1.0	0.6	2.5
0611	6.3	11	1.0	0.5	2.5
0613	6.3	13	1.0	0.6	2.5
0808	8	8	1.0	0.6	3.5
0811	8	11	1.0	0.6	3.5
0812	8	12	1.0	0.6	3.5
0815	8	15	1.5	0.6	3.5
1010	10	10	1.0	0.6	5.0
1012	10	12	1.0	0.6	5.0
1016	10	16	1.5	0.6	5.0

◆ Marking



◆ PART NUMBER SYSTEM(Example : 6.3V 470 μ F)

P	P	H	0	J	4	7	1	M	0	6	0	8	0	0	N
														Print color(Red)	
														Lead forming Type code	
														Size code(0608 : 6.3×8)	
														Capacitance tolerance code(M: $\pm 20\%$)	
														Capacitance code (470 μ F)	
														Voltage code(6.3V)	
														Series code(PH)	
														Category code(P)	

CONDUCTIVE POLYMER ALUMINUM SOLID CAPACITORS

TOPAZCON

PH Series

◆ Case size & Permissible

WV (Vdc)	Cap (μF)	Case Size ΦD×L (mm)	Max.Rated ripple current mA _{rms} @105℃100KHz	ESR 100~300KHz (mΩ _{max})
2.5	330	6.3×8	3500	8
	560	6.3×8	4700	8
	820	6.3×8	5000	8
		8×8	5400	8
6.3	220	6.3×5	1800	45
	330	6.3×8	3500	10
	470	6.3×8	3500	10
		8×8	3500	10
	560	6.3×8	3500	10
	820	8×11	3800	8
	1000	8×11	3800	8
	1500	10×12	4500	8
10	220	6.3×8	2500	15
	270	6.3×8	2800	15
	330	8×8	3500	15
16	100	6.3×5	2490	24
		6.3×8	2500	20
	220	6.3×8	2800	15
	270	6.3×8	3500	15
		8×8	3500	15
		8×11	4000	12
	330	8×8	3500	15
	470	8×11	4000	12
		10×12	5000	12
	560	8×11	4500	12
	820	10×12	5400	12
	1000	10×12	5400	12
25	100	6.3×8	1200	40
	220	8×11	2500	25
	270	8×11	2500	25
	330	10×12	3000	25
	470	10×12	3000	25

◆ RIRIPPLE CURRENT MULTIPLIERS Frequency Multipliers

Vdc	Frequency (Hz)			
	120	1K	10K	100K
2.5~25	0.05	0.3	0.7	1.0