

EP-Con (Aluminum Solid Capacitors with Conductive Polymer Capacitors)

EPQ Series

■ Specifications

Table-1

Items	Conditions	Characteristics		
Category temperature range	-	-55°C to +105°C		
Tolerance on rated capacitance	120Hz	M: ±20%		
Tangent of loss angle	120Hz	Less than or equal to the value of Table-4		
Leakage Current *1	After 2 minutes	Less than or equal to the value of Table-4		
ESR	-	Less than or equal to the value of Table-4		
Characteristics of impedance ratio at high temp. and low temp.	Based the value at 100KHz, +20°C	-55°C	Z/Z20°C	0.75 to 1.25
		+105°C	Z/Z20°C	0.75 to 1.25
Endurance	105°C, 2000h, Retest voltage applied	Δ C/C	Within ±20%	
		Tan- δ	1.5times or less than an initial standard	
		ESR	1.5times or less than an initial standard	
		Leakage Current	Below an initial standard (after voltage processing)	
Damp heat (Steady state)	60°C, 90 to 95%RH 1000h No applied voltage	Δ C/C	Within ±20%	
		Tan- δ	1.5times or less than an initial standard	
		ESR	1.5times or less than an initial standard	
		Leakage Current	Below an initial standard (after voltage processing)	
Resistance to soldering heat	(VPS) (230°C × 75s)	Δ C/C	Within ±20%	
		Tan- δ	1.3times or less than an initial standard	
		ESR	1.3times or less than an initial standard	
		Leakage Current	Below an initial standard (after voltage processing)	

*1 In case of some problems for measured values, measure after applying rated voltage for 120minutes at 105°C

■ Dimensions

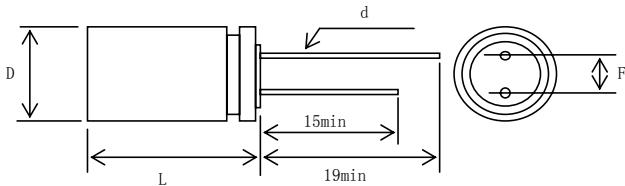


Table-2

Size code	D±0.5	L+1.5	F±0.5	d±0.05	Unit:(mm)
8×8	8	8	3.5		
8×10.5		10.5			
10×8		8			
10×10.5	10	10.5	5.0		
10×12.5		12.5			

■ Frequency coefficient for ripple current

Table-3

Frequency	120Hz ≤ f < 1KHz	1KHz ≤ f < 10KHz	10KHz ≤ f < 100KHz	100KHz ≤ f < 500KHz
Conficient	0.05	0.3	0.7	1

■ Table-4 EPQ Series Characteristics List

Size Code	Rated Voltage (V)	Rated Capacitance (μF)	ESR 100KHz to 300KHz (mΩ max)	Rated ripple current 100KHz/105°C(mA.rms)	Tangent of loss angle (max)	Leakage current (μA) (max)*1
8×8	2.5	560	5.5	6400	0.1	280
	2.5	680	5.5	6400	0.1	340
	2.5	820	5.5	7000	0.1	410
	4	560	5.5	6400	0.1	448
	4	680	5.5	6400	0.1	544
	6.3	330	7.5	6400	0.1	416
	6.3	390	6.5	6400	0.1	491
	6.3	470	6.5	6400	0.1	592
	6.3	560	6.5	6400	0.1	706
	10	220	10.5	5000	0.1	440
8×10.5	10	270	9.5	5300	0.1	540
	16	100	16.0	4800	0.1	320
	2.5	1000	6.5	6600	0.1	500
	2.5	1200	6.5	6600	0.1	600
	4	820	6.5	6600	0.1	656
	4	1000	6.5	6600	0.1	800
	6.3	680	6.5	6600	0.1	857
	10	470	7.5	5400	0.1	940
16	150	14.0	5000	0.1	480	
	16	180	12.5	5400	0.1	576

Table-4 EPQ Serise Characteristics List

Size Code	Rated Voltage (V)	Rated Capacitance (μ F)	ESR 100KHz to 300KHz ($m\Omega$ max)	Rated ripple current 100KHz/105°C(mA.rms)	Tangent of loss angle (max)	Leakage current (μ A) (max)*1
10×8	2.5	1500	6.5	7000	0.1	750
	4	1200	6.5	7000	0.1	960
	6.3	820	6.5	7000	0.1	1033
	6.3	1000	6.5	7000	0.1	1260
	10	680	7.5	6800	0.1	1360
10×10.5	2.5	1800	6.5	7000	0.1	900
	2.5	2200	6.5	7000	0.1	1100
	4	1500	6.5	7000	0.1	1200
	10	820	6.5	6800	0.1	1640
	16	270	11.5	6200	0.1	864
	16	330	10.5	6400	0.1	1056
10×12.5	2.5	2700	5.5	7000	0.1	1350
	10	1000	6.5	6800	0.1	2000
	16	470	10.5	6500	0.1	1504