### Panasonic Conductive Polymer Aluminum Solid Capacitors

#### **Radial Lead Type**

**OS**-CON

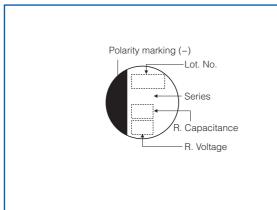
Series: SEQP

#### **Features**

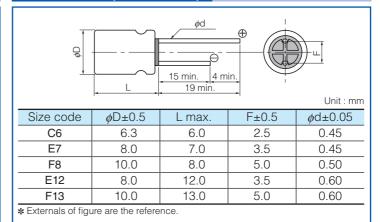
- High voltage (32 V.DC max.)
- 125 °C 1000 h
- RoHS compliance, Halogen free

Specifications								
Size code	C6	E7	F8	E12	F13			
Category temperature range	−55 °C to +125 °C							
Rated voltage range	4 V.DC to 20 V.DC	4 V.DC to 32 V.DC			4 V.DC to 20 V.DC			
Rated capacitance range	22 μF to 150 μF	150 μF   6.8 μF to 330 μF   15 μF to		18 μF to 560 μF	150 μF to 1200 μF			
Capacitance tolerance	±20 % (120 Hz / + 20 °C)							
Leakage current	Please see the attached characteristics list							
Dissipation factor (tan $\delta$ )	Please see the attached characteristics list							
Endurance	+125 °C, 1000 h/+105 °C, 5000 h, rated voltage applied							
	Capacitance change	ge Within ±20 % of the initial value						
	tan $\delta$	§ ≤ 200 % of the initial limit						
	DC leakage current   Within the initial limit							
Damp heat (Steady State)	+60 °C, 90 % to 95 %, 1000 h, No-applied voltage							
	Capacitance change	ance change Within ±20 % of the initial value						
	$ an \delta$	≤ 150 % of the initial limit						
	DC leakage curren	current Within the initial limit (after voltage processing)						

#### Marking



#### **Dimensions (not to scale)**





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#### **Characteristics list**

	Rated voltage (V.DC)	Rated capacitance (µF)	Case size (mm)			Specifications					
Series			φD	L	Size code	Ripple*1 current (mAr.m.s.)	Allowable *1 ripple current (mAr.m.s.)	ESR *2 (m $\Omega$ max.)	tan δ*3	LC*4 (µA)	Part number
	4.0	150	6.3	6.0	C6	572	1810	40	0.12	300	4SEQP150M
		330	8.0	7.0	E7	810	2560	35	0.12	660	4SEQP330M
		560	8.0	12.0	E12	1430	4520	13	0.15	448	4SEQP560M
		680	10.0	8.0	F8	1170	3700	25	0.12	544	4SEQP680M
		1200	10.0	13.0	F13	1721	5440	12	0.18	960	4SEQP1200M
		82	6.3	6.0	C6	537	1700	45	0.12	258	6SEQP82M
		150	8.0	7.0	E7	810	2560	35	0.12	472	6SEQP150M
	6.3	330	10.0	8.0	F8	1170	3700	25	0.12	416	6SEQP330M
		470	8.0	12.0	E12	1332	4210	15	0.15	592	6SEQP470M
		820	10.0	13.0	F13	1721	5440	12	0.15	775	6SEQP820M
		56	6.3	6.0	C6	537	1700	45	0.12	280	10SEQP56M
	10	120	8.0	7.0	E7	810	2560	35	0.12	600	10SEQP120M
		270	10.0	8.0	F8	1170	3700	25	0.12	540	10SEQP270M
SEQP		330	8.0	12.0	E12	1250	3950	17	0.15	660	10SEQP330M
		560	10.0	13.0	F13	1655	5230	13	0.15	840	10SEQP560M
	16	39	6.3	6.0	C6	512	1620	50	0.10	312	16SEQP39M
		82	8.0	7.0	E7	670	2120	40	0.12	656	16SEQP82M
		150	10.0	8.0	F8	955	3020	30	0.12	480	16SEQP150M
		180	8.0	12.0	E12	1151	3640	20	0.15	576	16SEQP180M
		330	10.0	13.0	F13	1493	4720	16	0.15	792	16SEQP330M
	20	22	6.3	6.0	C6	458	1450	60	0.10	220	20SEQP22M
		47	8.0	7.0	E7	598	1890	45	0.12	470	20SEQP47M
		68	10.0	8.0	F8	759	2400	40	0.12	272	20SEQP68M
		100	8.0	12.0	E12	1050	3320	24	0.15	400	20SEQP100M
		150	10.0	13.0	F13	1367	4320	20	0.15	600	20SEQP150M
	32	6.8	8.0	7.0	E7	440	1400	100	0.10	44	32SEQP6R8M
		15	10.0	8.0	F8	560	1800	80	0.10	96	32SEQP15M
		18	8.0	12.0	E12	790	2500	50	0.12	115	32SEQP18M

<sup>\$1</sup> Ripple current (100 kHz/  $\pm$ 105 °C < Tx  $\leq$  125 °C), Allowable ripple current (100 kHz / Tx  $\leq$  105 °C)

<sup>♦</sup> Please refer to each page in this catarog for "Flow conditions" and "Taping specifications".

Frequency correction factor for ripple current								
Frequency	120 Hz ≤ f < 1 kHz	1 kHz ≦ f < 10 kHz	10 kHz ≤ f < 100 kHz	100 kHz ≤ f < 500 kHz				
Coefficient	0.05	0.3	0.7	1				

<sup>2</sup> ESR (100 kHz to 300 kHz/+20 °C) 3 tan 3 (120 Hz/+20 °C) 4 After 2 minutes



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